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✓ FISHERY CONSERVATION AND MANAGEMENT
ACT OF 1976

95-1

HEARING
BEFORE THE
COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
UNITED STATES SENATE
NINETY-FIFTH CONGRESS

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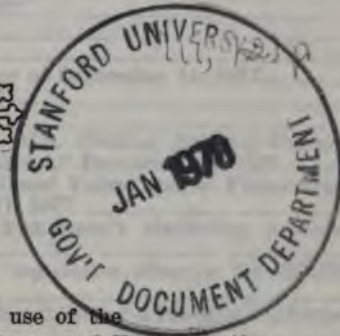
FIRST SESSION

ON

THE FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976
(PUBLIC LAW 94-265)

AUGUST 20, 1977

Serial No. 95-45



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THE FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976

SATURDAY, AUGUST 20, 1977

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Newport, Oreg.

The committee met at 9 a.m. in the meeting room of the Marine Science Center, Oregon State University, Hon. Bob Packwood presiding.

OPENING STATEMENT BY SENATOR PACKWOOD

Senator PACKWOOD. The hearing will come to order. Let me read you the witness list as I have it, in the order that they will be called, so that you will have some reasonable idea as to where you will be on the testimony. We will start with John McKean, then Jack Donaldson, Bob Hudson, Kent Martin, Art Paquet, Jene Nordmark, Craig Marlette, Henry Pavelek, Bill Wick, James Coon, Ted Bugas, Barry Fisher, Basil Edmonds, Stan Zapell, Wayne Johnson, Don Christianson, Arvie and Ed Freeman, and Ralph Rhinerstin, in that order.

If there are others who want to testify when we are done, I will take them; but those are the people that have asked ahead of time and I have put them in that order.

The reason I asked Senator Magnuson, and the Committee on Commerce, Science, and Transportation, to hold hearings in Newport is that this is the first time the committee would have some oversight hearings on the new 200-mile zone. I recall that I met with a number of you over the years when we were trying to pass the 200-mile zone bill and going through the frustrations of one international conference after another. The State Department's attitude was "Let's just wait another 6 months or another year and give diplomacy a chance because sooner or later we will work out some kind of a worldwide agreement" and of course you all know the pitfalls of that approach. We waited and waited and waited and waited. I think had the United States finally just not acted and said we are going to have a 200-mile zone we would still be waiting.

I also recall, though, and I think I told some of you, that once we got the 200-mile zone it would not be the panacea that everyone thought it would be, that this would not be the end of all problems; that as soon as we had it there would be problems over fish allocations. What would happen if American fishermen couldn't catch all of a certain kind of fish? Would foreigners be allowed to fish and how much could they take? Could American fishermen sell their fish to foreigners? I

think I went through a whole list of problems which many people thought at the time would just never come to pass; once we had the 200-mile zone the answer would be evident.

Here's an analogy to what I have described.

After years of work with the Forest Service the problems are similar: Disputes between the Forest Service and others as to how much timber would be taken off of land, how much would be left for recreation, how much for environment, and how much for wilderness. These kinds of inevitable management problems would occur with the commercial fishing over how much for sports fishing, how much would not be taken at all, the differences of opinion between marine biologists as to how many fish were safe to take. These disputes are honest ones. It rests on differences of opinions among many people and it will go on as long as we have the 200-mile fishing zone.

That is part of the reason for the hearings today, for all of you to present testimony on any of those subjects that you want. When the hearing is done I will leave the record open for at least 30 days should anyone else want to submit statements.

So with that, let's start. We will start with John McKean, the chairman of the Pacific Fishery Management Council.

STATEMENT OF JOHN McKEAN, CHAIRMAN, PACIFIC FISHERY MANAGEMENT COUNCIL

Mr. McKEAN. Thank you, Mr. Chairman. I am John McKean, one of the appointed members of the Pacific Fishery Management Council and currently serving as chairman.

I would like to briefly tell the committee what the experience of the council has been in implementing the Fishery Conservation Management Act and hopefully, as the hearing goes on, maybe we can answer questions or provide other information that would be helpful to the committee in evaluating the implementation of the act.

The Pacific Council has labored for nearly 1 year at the task of developing comprehensive fishery management plans in compliance with the provisions of the Fishery Conservation Management Act. My comments today will briefly describe the Pacific Council performance and some of the problems we have encountered in pursuing the goals assigned by the act.

It is my view that the Fishery Conservation and Management Act is very comprehensive and thorough in defining both the goals and procedures for fishery management. The principal problem during the first year has been the difficulty of making optimum decisions and meeting the lengthy review processes prescribed by the act in a timely manner. It is fortunate that section 304(c) of the act authorized the Secretary of Commerce to develop preliminary plans for fisheries subject to foreign exploitation.

In the jurisdiction of the Pacific Council the National Marine Fisheries Service promptly prepared three preliminary plans before really the Council was operating, one for trawl fish, one for salmon, and one for sablefish. The Council did get organized and did have an opportunity to review those plans before they were implemented by the Secretary. Collectively, these plans recognized only hake and jack mackerel as target species of Oregon, California, and Washington.

The trawl fish plan did authorize an incidental catch of other bottom-fish which after review by the Pacific Council was reduced by approximately one-half in the final preliminary plan.

In its initial meeting in October 1976, the Council determined that the preliminary plan for salmon was not adequate. It addressed only foreign fishing and not the acute need for regulation of domestic fisheries. The Council therefore assigned first priority to development of a salmon management plan for implementation in 1977. The Council has also initiated planning programs for ground fisheries, including sablefish, anchovies, pink shrimp, Dungeness crab, squid, and saury.

For today's discussion I would like to dwell on our experience with the salmon plan—this has been our most controversial and difficult task and one of the most complicated fisheries in U.S. waters—and kind of use it as an example of the experience we have had in implementing the act.

Recognizing the diversity and intensity of public interest in salmon, the Council created a 23-person salmon advisory panel, which is inclusive of all user groups and interested parties. Its purpose was to assist the professional planning team and the Council in interpreting available data into sound management plans. These advisory panels were authorized by the act and the Council has made wide use of them in the planning effort.

The Council also created an 11-person scientific committee—which is authorized by the act. After 2 months of effort it was clear that much of the information required for a comprehensive salmon management plan was not immediately available. So the scope of the 1977 plan was modified to address only the ocean trawl and recreational fisheries off California, Oregon, and Washington. It was also clearly evident that the ultimate comprehensive plan must be coordinated with the North Pacific Council and Canada to provide a rational coastwide system that would minimize or at least identify interception problems that were outside the Pacific Council's jurisdiction.

In February the Council adopted a second draft of the 1977 plan for trawl and recreational salmon fishing off California, Oregon, and Washington which, to the best of our ability, recognized conservation needs, judicial allocations to Indians and optimum yield, as required by the act. The draft plan was then released to the public and began the lengthy process of review by the public, the Department of Commerce, the Council on Environmental Quality, the Environmental Protection Agency, the State Department, and others. Public hearings were held in all four States to get public input on all aspects of the plan.

It was comforting to the Council to observe that the input from the public hearings was practically identical to the diversity of views we received from the advisory panel. This suggests that the advisory panels can be an accurate and efficient means of evaluating user responses to management alternatives.

After 4 months of review, the plan was amended to accommodate some of the expressed concerns and finally adopted by the Secretary of Commerce as an emergency measure on May 25, 1977. The time requirement of only 4 months to review and implement a management plan for such complicated fisheries as salmon seems reasonable, but this was only possible because the status of some races of salmon

and the urgency of the judicial apportionments provided cause to implement the plan as an emergency action, as provided for in the act.

Latest calculations reveal that in the absence of an emergency it will require 7½ months, or a minimum of 228 days, to review the management plans before implementation. It is the Council's view that meaningful management plans that will achieve optimum yield must be based on current projections of supply and demand and that the 228-day review period requires all planning to be done at least a year in advance of implementation.

For example, it is logical that the salmon management plan for 1978 should be based on accurate measures of the impact of the 1977 plan on the salmon resources and the dependent users. But because of the lengthy review process the Council must develop plans for 1978 before the data from the 1977 season is available.

With further reference to salmon, the Council's present goal is to have a comprehensive plan for implementation in 1979. That plan will address the problems of salmon production and utilization throughout their range. It is also intended that input and cooperation from the North Pacific Council and Canada would provide coordination of management on a coastwide basis.

In summary, the Pacific Council believes the Fishery Conservation and Management Act of 1976 is well designed and necessary for the protection and rational management of fisheries off the U.S. coast. The 1977 allocation and regulation of foreign fishing in U.S. waters offers a substantial improvement and a promise of opportunity to expand domestic fisheries to more fully utilize the existing and potential fish production.

Prior to implementation of the act there were eight foreign countries fishing in the Council's area of jurisdiction. They have been reduced to two, with a corresponding substantial decrease in effort and catch. This is indeed a positive manifestation of the act.

No legislation is so perfect that it cannot be improved. In its initial year of experience the Pacific Council offers the following suggestions for improvement of the act:

Shorten the statutory review requirements for management plans so that there is an opportunity to utilize current information in developing and modifying plans. Potentials here are to eliminate the duplicatory NEPA review process and to shorten the statutory 45-day review period following publication of regulations that are conceived in the plans.

Also, the 6½-month time period required for allocation of fishing privileges to foreign fleets should be reduced to permit consideration of current fishing experience in these allocations. To elaborate here I would like to point out that we are right now pressed with the duty of modifying the preliminary plans for trawl fisheries before the foreign fishermen for this year have even completed their fishing. We have very meager records of what has occurred. We feel that it is unfortunate that we have to shoot blind in trying to project what the opportunities should be in 1978 when we haven't really had an opportunity to see what the impact of this year's regulations has been.

The act should be amended to shorten the time required for review of permit applications and for placements of permits aboard foreign

vessels. We could dwell on this at greater length if the committee desires, but we think there is an opportunity here to shorten the time required for review and placement of permits so that we could have more leadtime and more opportunity to use current data in the original plans and regulations.

The third recommendation we have is to modify the application of the Federal Advisory Committee Act so the Councils can act more promptly on emergency issues. The existing laws require that notice of all Council, of subgroup meetings must be published in the Federal Register 20 days in advance of a planned meeting. This requirement frequently delays needed actions. I might say that this is probably more of a problem with our subgroups, our advisory panels and our work teams and scientific committee, than it is with the Council itself; however, quite often we are delayed in taking an action because of the necessity for publishing notice 20 days in advance in the Federal Register. Also, I think the open meeting law, where everything has to be done in the "glass fishbowl" of an open meeting has a tendency to withhold a lot of valuable input and free exchange of information within the work groups that are authorized by the act.

Our fourth recommendation really doesn't require any amendment of the act. We do feel that Congress should recognize that successful implementation of the Fishery Conservation and Management Act will require more aggressive programs than have been funded to date. Two examples we would point to, we think that the observer program on foreign fishing vessels is inadequate, we aren't getting a good reading with the funds that have been made available for observers on foreign vessels; we also think there are inadequate funds for the resource assessments and the economic and social studies that are needed to complete the plans.

In closing, I would like to express the appreciation of the Pacific Council for the leadership and assistance that has been provided by the National Marine Fisheries Service, the National Oceanic and Atmospheric Administration, and the Department of Commerce. Those agencies have cooperated fully with the Council in implementing the act and many of the provincial barriers that had previously existed between the States and the Federal Government and I think industry and government are, in my judgment at last, disappearing.

We have a good working relationship through the regional communication device of the Council and I think we are on the road with a good show. Thank you.

Senator PACKWOOD. John, what was the hard data, the substantive evidence you had to justify the closure north of Tillamook Head to at least the commercial fishermen?

Mr. McKEAN. Why did we draw the line north of Tillamook Head?

Senator PACKWOOD. And why just for commercial. You didn't apply it to the charter fishermen.

Mr. McKEAN. To the recreational fishermen.

Senator PACKWOOD. That's a different group, I believe.

Mr. McKEAN. Well, the reason for the mark at Tillamook Head was that races of fish in the Columbia River and some of the races in Washington streams were in trouble; conservation-wise we weren't getting adequate escapement. We had some evidence of that south of Tillamook Head, but not as well defined. Therefore, Tillamook Head

became a dividing point between what was critical and deserving of emergency action and what could wait until we could complete the surveys and develop a comprehensive plan. The decision that the reduction in the ocean catch should come primarily from the commercial trawl fishery rather than recreational fishery was based on a number of factors: No. 1, that the recreational fishery had been subject to a number of reductions in the past regulatory efforts and had been more subject to State regulation than the commercial trawl fishery in the past—and particularly the recreational fishery had made great concessions in inland waters, particularly in the Columbia River watershed.

The other major factor was that we are talking about BB guns and cannons in terms of numbers of fish. The percentage varies by State and geographic area, but the lion's share of the ocean catch of fish is taken in commercial trawl fishery. So therefore it was in the commercial trawl fishery that there was an opportunity to make the savings that would provide for the conservation cause and to meet the judicial allocations to the Indians.

Senator PACKWOOD. The reason I asked that question is I recall so vividly 3 years ago when we had the oil embargo and there was a limitation on available petroleum. The charter, or as you call it, the recreation industry, made the argument that they were as much in business as were the commercial fishermen and that they should not be treated recreationally—which would have meant a smaller allocation of gasoline. They wanted to be treated as being in the business of commercial fishing from the standpoint of allocation at that time. Today there seems to be a differentiation that there is no longer any petroleum shortage; they will be classed recreation.

Mr. McKEAN. I think the Council didn't look at the recreational fishery as being the charter boat industry. We look at the recreational fishery as being the citizens of the United States and their freedom to fish in the ocean. As you well know, many of our citizens never go on a charter boat, they have their own little boat and they go out on the ocean and they fish individually.

There are concerns about the expansion of the charter boat fishery. The State of Washington is considering a limited entry program to limit the number of charter boats operating. In my judgment, this is a better way to go than to infringe upon the freedoms of the individual citizen in order to get at what may be an overcapitalized operation.

Senator PACKWOOD. Let me reverse the question. If by chance we suffer another embargo—and if we do it is going to be much worse than 3 years ago because we are importing almost half of our oil now—and if a policy decision is made that for the sake of the national good one of the areas that has to be substantially restrained is recreation, in that case the charter boat fishermen would be in a position to be more substantially restrained than commercial fishermen.

Mr. McKEAN. You are speaking in terms of fuel.

Senator PACKWOOD. Fuel allocation. Would you classify them in that case as a recreational industry and say they have got to be diminished along with all of the recreational industries and not classify them as they wanted to be classified then, as basically the same as commercial fishermen?

Mr. McKEAN. You can't eat your cake and have it, too.

Senator PACKWOOD. As you are looking toward the season next year, how much advance notice are you going to be able to give all of the interested parties as to whether there will be closures and when and to whom they will apply? I realize this first season you were working under a tight time schedule.

Mr. McKEAN. At this point are we talking about salmon or foreign fishing or—

Senator PACKWOOD. Let's talk generally. You talk about salmon or foreign fishing. I suppose anybody that is involved, whether it be a foreign fishing boat or a commercial fisherman, even if they don't like whatever decision you come out with, would like to know about it as far ahead of time as possible.

Mr. McKEAN. I'll give you our timetable for salmon as an example. Right now our work team has in draft form a salmon management plan for 1978. This next week they'll be meeting with our 23-man advisory panel to review this with them, they will be meeting with the scientific committee to review it with them, meeting with the Canadians to review it with them. In September we will consider this, we may adopt it and release it to the public and to Commerce at that time. We really could wait until October and still get it implemented by next May. So we will probably use it until October.

Then we will go into the public hearing process. On foreign fishing, primarily there is—

Senator PACKWOOD. Stick with the salmon there a moment. That means that they will not know until roughly next May as to what and where they will be able to fish during the summer?

Mr. McKEAN. Well, as of next week, when this plan is exposed to the advisory panel, the public is going to have—the public is well represented on that advisory panel and the communication is almost instantaneous with anything that is given to the advisory panel and gets out to industry and to sports groups and others, through their representatives.

The formal release, when the Council adopts it and forwards it to the Secretary and it is published in the Federal Register, the formal release to the public follows, then public hearings. So there is communication from this time until the Secretary adopts it on what the rule is going to be.

Senator PACKWOOD. I hear what you are saying. Let me ask it again. Will it be roughly in May when this process is finalized, so that anybody who is depending upon a final decision won't know exactly what it is until May?

Mr. McKEAN. No; not until the Secretary adopts it.

Senator PACKWOOD. You might have some ideas as you are going along because you will be able to tell by the input in the hearings, and you don't expect the Secretary to change it very dramatically, so you can take a 90-percent guess and probably be right by February or March.

No other questions. Thank you very much.

Mr. McKEAN. Mr. Chairman, if I may, I would like to introduce Mr. Lorry Nakatsu, who is the executive director of the Council and is here to help me answer questions as the day goes on.

Senator PACKWOOD. Glad to have you up with us. Thank you very much for coming.

Jack Donaldson, is he here? I didn't see him come in yet.
Let's go to Bob Hudson, the All Coast Fishermen's Marketing Association.

**STATEMENT OF BOB HUDSON, PRESIDENT, NATIONAL
FEDERATION OF FISHERMEN**

Mr. HUDSON. Senator Packwood, I would like to take this opportunity before we get into this to present you with the All Coast Fishermen's Marketing Association Award and initiate you into the Loyal and Mystical Order of the Hook.

Senator PACKWOOD. Thank you.

Mr. HUDSON. For your continuing awareness of the needs of the resource and the fishery. We thank you very much and are obliged to you for your help.

Senator PACKWOOD. Bob just told me about this just before he appeared and I asked him if there was any kind of an initiation ceremony. I remember when I was initiated by the Coos Bay Pirates. They actually draw blood out of you in their initiation ceremony. I was going to appreciate the offer but then declined, especially when he mentioned "hook."

Thank you very much, Bob. I am very flattered.

Mr. HUDSON. I'm Bob Hudson, president of the National Federation of Fishermen, business agent for All-Coast Fishermen's Marketing Association and Oregon Trail Advisor on the Salmon Advisory Panel, Pacific Fishery Management Council. On behalf of the Oregon commercial salmon fishery and their families we appreciate your selecting Oregon's central coastal area to hold this hearing. We will try to present what we perceive the problem areas to be in the Fishery Conservation and Management Act as clearly and accurately as possible.

If one were to point to any one issue involving the commercial salmon industry, it would have to be the lack of comprehension that management has for that industry. Their goals and directions have historically been without regard to the hardship that those regulations may have worked on the men and women within the industry or the jobs or other economic negative impact that was forfeit.

In one of the most exhaustive studies ever done on the Columbia River, the prestigious Pacific Northwest Regional Commission recorded that:

Many once productive sport and commercial fisheries have been reduced and others eliminated. Many lifestyles, livelihoods and local economies have been severely impacted. These socioeconomic impacts are poorly understood. Following the almost universal pattern, Columbia Basin salmon and steelhead management has traditionally been the almost exclusive province of the essential biological sciences. Oregon, Washington, and Idaho salmon and steelhead management agencies employ no staff trained in the social and economic sciences.

The study, the "Columbia Basin Salmon and Steelhead Analysis," has been hailed by biologists as one of the foremost works of the decade on the Columbia River and the makeup of the members of the Pacific Northwest Regional Commission precludes any of the usual claims that the salmon industry is presenting biased information.

Like every other closeknit occupation, commercial salmon fishermen have popular cliches applied to them by those that justify manage-

ment authority where there is evidence of considerable potential economic hardship and an absence of definitive justification for increasingly restrictive management. The cliché currently popular is that the commercial salmon and trawl industry has been "largely unregulated for the past 75 years." The use of this trite phrase suggests that since we are said not to have been regulated that we have some coming.

A look at the regulations we operate under suggests that, if anything, we are overregulated. Since we are the only primary food producing industry on the ocean whose role is to feed people salmon, to whom are we being compared for regulation? Are we being compared to the charter industry, who offers a recreational experience as their prime product? Such a comparison is not only illogical, it is without merit. Are we being compared to the sport fishery? Sport fishing is also recreation. The two are as alike as a weekend gardener as compared to a production farmer.

Factually, we are heavily regulated by many States and Federal agencies. Fishery management agencies tell us when we can fish, where we can fish, when we cannot fish, what type of fish we can take, and what types we cannot. We are told what type of gear we can use and what we cannot use. We are regulated by individual State landing laws which are enforceable by Federal, State, and local enforcement agencies, including sheriff's department, the respective State police agencies, national marine fishery service special agents, U.S. customs agents, and lately the USCG.

Since it is common practice for fishermen to have their families aboard during summer, their boats are their homes. But illegal search and seizure laws do not apply in any case. The unfortunate fisherman who protests being boarded at night while at anchor can easily forfeit his license, which is his livelihood, for refusing permission to be boarded without a duly prepared search warrant, whether his family is aboard or not.

I might add just as an afterthought on this that should a fisherman have strong feelings about the constitutional right to protection from illegal search and seizure and refuses boarding and the boarding is attempted and he physically attempts to stop the boarding, he will be taken ashore in chains and a prize crew will be put aboard his vessel.

If this sounds like an industry that is largely unregulated I fear for the future of this country.

There is little point in trying to outline the most critical regulations that a successful salmon trawler must learn, but I will briefly try and outline it for those that can comprehend. That is weather. A successful trawler must be a canny judge of weather or the price he might be called upon to pay is the ultimate price that many have paid. There is no appeal to death by drowning. I personally have driven a family home from the North Jetty when they came down to watch their breadwinner cross a breaking bar because he stayed out too long trying to catch enough fish to meet an obligation that was past due. His widow cried on the way home and said to me when we reached their home, "I told him we didn't need the money that bad."

No other salmon fishery pays the price for salmon that the trawl fishery does. When I hear the term "largely unregulated for the past 75 years" I see more dead men than this room can hold who paid the price for making a mistake on the rules of weather.

The fishery conservation and management plan is clear about the rules under which the Council will operate. But there is some serious question about the difference between the letter of the law and lip service in implementation. The salmon management plan was implemented with virtually no notice to the fleet on what the final regulations were, but we were clearly told what the penalties would be if we erred. Despite the Secretary's suggestion that perhaps a broader allocation of the social and economic impact might be in order, the Council carried on and men who have fished that closed area for generations found themselves displaced.

The national standards clearly address this area, they weren't responded to, so while a large group of primary food producers were locked out of the closed zone, other users worked within.

Our intent here is not to stir interuser group feuds or rail at the Council. Our concern is that the existing regulations do not conform to the national standards either via their forming or implementation. I believe the Secretary knew this, too.

To close with one final quote from the Columbia Basin Salmon and Steelhead Analysis, on the topic of management without adequate consideration of social and economic impact data under optimum yield, as per the Fishery Conservation and Management Act:

The resulting mutual frustration traumatizes the difficult allocation process and everyone involved. It has contributed to the obvious erosion of public confidence in the regulatory agencies. This has serious implications for their ability to marshal public and political support for programs to protect the resource and get public understanding of, if not satisfaction with, increasingly difficult allocation decisions.

Gentlemen, if you have questions I am at your disposal. Otherwise, thank you for the opportunity to testify. We are grateful.

Senator PACKWOOD. I have a few questions, Bob. What access did you personally or you on behalf of the association have to the Advisory Council or otherwise with regard to the decisions that were made finally by the Council? You talk here like they made no findings at all, didn't care at all about the economic impact this was going to have. Did you have at least the chance to give them the benefit of your views on what the economic impact would be?

Mr. HUDSON. Part of the testimony I have given, Senator, has indicated that—and accurately—that historically there has been very little consideration given to social and economic impact. We—and I will say “we” because the California and the Washington advisers also attempted to get the message across—in the eyes of some of the biological people or State managers I am sure we were responding to traditional roles that fishermen have whenever they have seen a possible cutback in their economic picture. The people on the ocean, their boats represent not only their livelihoods and way of life, but frequently life savings. Since there is no or very little social or economic data available, in the absence of social and economic data these restrictions are implemented so that we have to refer to it as “management in the dark” and “let the chips fall where they may.”

I understand that this could be very frustrating to a recreational fishery. I can see it would be more frustrating perhaps to a charter fishery. But to a commercial industry, where you have, for instance in the closed zone, people that have fished that area for two and three generations who are just as territorial about that area as a wild ani-

mal might be about an area in the woods. He knows this area, he knows the safe places, the fisherman knows this area, he knows the bottom, he knows the currents, he knows where the reefs are that aren't on the charts, he knows where to look for feed and consequently where to find fish.

This is one of the things that differentiates between the trawl industry and perhaps the recreational fishery that we have never quite gotten across, and that is that a successful trawler is a very highly skilled fisherman that doesn't just go out across the bar and drag hooks around in the water—and I don't mean that in a derogatory sense to any of the other people, from the other user groups—and this knowledge does not come in books. It is something that you acquire through years and years and years of involvement. It is true we have an increasing number of people coming into the trawl industry and it is getting burdensome: we have many people that are exploiting their role as trawlers for tax write-off purposes and various other reasons.

Senator PACKWOOD. You say exploiting it. Do you mean they are investing in it and writing off the loss but they are not really involved in it for a living?

Mr. HUDSON. That is correct.

Senator PACKWOOD. Are they involved in it fulltime or are they simply investing, buying a boat and sending somebody else out?

Mr. HUDSON. There are many professional people that are investing in boats because their investment counselors tell them it is good business.

Senator PACKWOOD. And they are not themselves personally involved in fishing at all?

Mr. HUDSON. No, sir; one of the things that is unique about Oregon and Washington and probably to the same degree California is that 85 to 95 percent of your vessels are family owned—they are not industry vessels. This is particularly true in the trawl industry. This is what makes it so critical.

Senator PACKWOOD. Let me ask you a bit more on this. This is the first I have heard about this kind of problem. I ask because I am also on the Senate Finance Committee which has jurisdiction over taxes and tax reform. Every year we are going through the situation where we are trying to find out how it is exactly that the very wealthy people shelter their income, where they put it. Is this a growing trend of wealthy people to invest in fishing boats, maybe individually or maybe as a partnership for purposes of tax losses?

Mr. HUDSON. It appears to be becoming increasingly popular. I am not a financial consultant so I cannot tell you. There are several people here that might be able to tell you more about this. We are seeing yachts—last year or the year before last there was a 65-foot Chris Craft Constellation that was parked in the boat basin with one hand crank, a salmon reel on the back, and a commercial fishing license in the window. Theoretically that boat could be written off or depreciated as a commercial fishing vessel. There are some instances of this—

Senator PACKWOOD. Sort of like you would hate to make your living with that boat however.

Mr. HUDSON. Yes, sir.

Senator PACKWOOD. Did you have a feeling that the Advisory Council was stacked against you from the start, that whatever input you had wasn't going to make any difference?

Mr. HUDSON. I want to try and be careful at this point because when I went in as an adviser—and I think the California and Washington people shared this feeling—we were convinced that the Council was “out to get the trawl industry.” We railed at the Council and they railed at us and we had a good time and probably it had some therapy benefits, but very little communication existed between us. They thought that we were reactionary and abrasive because we were showing extreme concern for the livelihoods of the people we represent. We thought that they were completely unreasonable and unfeeling toward the hardship or the potential hardship that could be worked by these restrictions. As we interpreted the national standards we felt that perhaps they weren't being followed as closely as they could.

Senator PACKWOOD. Let me ask you about those national standards also, because basically the Council was supposed to make findings on negative economic impact, under the national standards.

Mr. HUDSON. That is true. Unfortunately, there is very little data, either social or economic, on the trawl industry. Why it has never been gathered I cannot answer. We as trawl advisers can talk to or advise, but unless it is in a book about that thick and is funded by national marine fishery service or somebody and has 42 Ph. D.'s that authored the study, it doesn't seem to get on the record. It is true that we may not be qualified observers. But when people are hungry in our towns on the coast we know it and we hear about it. When you have a bad year and all of a sudden you start seeing the new pickup that was planned doesn't show up or there is no—you know, the lack of affluence has been historic in the fishery. There is a false image that within the last decade we have had access to funding through Production Credit Association, for instance, so we could start getting the kind of gear that was necessary to produce.

But this is not an accurate image of affluence. I would off-the-cuff guess that perhaps 85 of the inner circle of producing salmon fishermen, 85 percent are heavily mortgaged. This is why we respond so abrasively when there are cutbacks discussed and bandied about—not bandied about. We don't feel it is given adequate consideration. If it's for conservation purposes and we are going to have to take cuts, fine, but let's cut it across the board.

And this “largely unrestricted for the last 75 years,” how can you work the loss of your fishing partner or something like that into the price of fish.

Senator PACKWOOD. When you talk about cuts across the board, Mr. McKean indicated that the recreational fishing industry is just barely a blip on the screen and that the commercial fishing industry is responsible for the overwhelming bulk of the catch and therefore, if you are going to conserve, that is where the bulk of the hardship has to fall. Is that true?

Mr. HUDSON. It depends on the State, as Mr. McKean said. The charter and recreational fisheries, these people are in different roles than we are in. We have not been compared to the charter or recreational fishery until recently, because our primary objective was to

feed people, their primary objective was to re-create. We felt that it was like comparing apples and oranges. If I am not mistaken, the Eastland resolution made an observation on the national comparison of harvest between commercial and recreational and the recreational was less than half.

But what is our difference in roles, what do we do.

Senator PACKWOOD. In Oregon, in the ocean how much of the catch is commercial of salmon and how much is recreation, if you know?

Mr. HUDSON. I would say probably two-thirds.

Senator PACKWOOD. Commercial.

Mr. HUDSON. Yes.

Senator PACKWOOD. Are you still on the Advisory Council?

Mr. HUDSON. Yes.

Senator PACKWOOD. You will soon be going through another year of planning for next year. What kind of evidence are the commercial fishermen going to be able to marshal in terms of economic impact to present this year? I realize you haven't had to marshal it before, you were never required to have it before until this act was passed. Will you be able to make some kind of a case for the economic impact, not only on the people involved directly in the industry but the communities where the industry is centered?

Mr. HUDSON. We will be working hard to do it. There are studies. I think the Council has contracted with a group for the drawing up of an economic impact study or an overview. Based on the amount of time that is available, I can't see how it will be as exhaustive as we might like, and I am not sure that there is any social consideration or social data available on what happens when you are a second- or third-generation fisherman and every cent you have in the world is essentially tied up in your boat and all of a sudden you are displaced from an area that you have fished all your life and maybe your father before you. What happens to you? You are displaced into an area that perhaps you may not be familiar with and then you lose the skill and the knowledge that you have acquired over the years and you just become like a recreational fisherman or a charter fisherman—you drag hooks around. There is no skill in dragging hooks around. There is a skill in finding the—you know.

Charter fishermen get to know a river mouth or an area and they get to know where to fish, but their range is far less than commercial fishermen. A commercial fisherman may range 200 or 300 or 400 miles in the course of his annual fisheries. He has to know that area. So that is why displacement has serious effects on commercial fishermen that a person might not be aware of.

Senator PACKWOOD. Thank you. I don't think I have any more questions. Next we will take Kent Martin.

STATEMENT OF RUSSELL BRISTOW, MEMBER, ADVISORY COMMITTEE OF THE COLUMBIA RIVER FISHERMEN'S PROTECTIVE UNION ON LEGISLATIVE PROBLEMS

Mr. BRISTOW. He is not here, but I am here and represent the Columbia River Gill Fishermen. Senator Packwood, gentlemen, I am Russell Bristow. I am a member of the advisory committee of the

Columbia River Fishermen's Protective Union on Legislative Problems and I was executive secretary and spent about 5 years working on this 200-mile thing.

Briefly, I am really disappointed in some aspects of it. I feel that our people should have full say over what happens to their salmon resource on the high seas, no matter where it swims.

Senator PACKWOOD. You mean beyond the 200 miles.

Mr. BRISTOW. That's right. I also feel that everybody should get equal treatment on the high seas on this salmon fishery, whether it be sport fishermen or commercial fishermen. This giving one person the advantage over another isn't right. The first problem that these people have to overcome on this thing is making sure that they are regulating the salmon fisheries to the benefit of the fish, not some minority group or groups.

I have been in this fishery for over 50 years, this is my 51st year. I was 20 years old when I started, I am 71 now. I am still an active fisherman. I just came back from Alaska, just put a season up there. I fish the Columbia River. I am a gill netter, not a trawler. During World War II, I traveled outside, I fished tuna, shark, a little of everything. I have been around all over the area. So I know the problems of all of the people involved. I do know that we are going to have to go to limited entry on fisheries, period, regardless of who it is. It must affect sport fishermen as well as commercial fishermen.

I personally wanted to see a moratorium on the issuing of any new licenses for commercial fishing this year on the Columbia River. We thought that we had this. It is something that is necessary. But we didn't get it because some of the legislators had the pressure put on them and somebody didn't want it, while the majority of the gill netters on the Columbia River wanted it, somebody somewhere along the line didn't.

Senator PACKWOOD. Let me ask you this: You say that the fisheries should be regulated for the benefit of the preservation of the fish and not for any particular interest group.

Mr. BRISTOW. That's right.

Senator PACKWOOD. Does that mean that if you are going to have to limit the catch and the commercial fishing industry is two-thirds of the catch, that they are going to have to take the brunt of the restriction simply because they are the largest part of the industry?

Mr. BRISTOW. Not necessarily, for the simple reason that a sport fisherman is harvesting a fish for his own personal use and enjoyment and doesn't really enter into the economic picture as the commercial fisherman does. The commercial fisherman is a person that is harvesting a food resource for the public as a whole, to be put on their tables for their benefit. It is a public resource they are harvesting. For that reason they should be given prior consideration.

I feel that you should try to work not only as an optimum sustained but as a maximum sustained yield program, myself. Now optimum is probably easier because it gives you more of a political way out. But on maximum you have to manage for the fishery resource. That is the way I look at it. I may be wrong, but that is my feeling. I have worked on this a long time.

Talk about anybody being regulated, the gill netters on the Columbia River understand what that means because when I first started

fishing, we fished 10 months out of the year on the Columbia River and harvested about 90 percent of the fish that went out to sea and came back. Now we harvest maybe 90 percent and the rest is harvested out to sea and many of it by the Canadians and others.

So there has to be a long hard look taken at this whole thing and honest consideration given as to how this fish is to be managed in the future if we are going to have a good food resource in the future. There is no reason why we can't. I feel that one of the major things is we have to stop this influx of every Tom, Dick, and Harry that can go out there and get a license. As was mentioned before by Bob Hudson here, many people are looking for an outlet here for a way of sport fishing that isn't quite right. I know that some of them have these pretty nice pleasure boats and they buy a commercial license and they put on a gurdy or two and go fishing maybe a time or two during the year so they have a tax write-off and their sport fishing is free. So that is one of your problems.

I am not going to dwell too long on this because I think enough has been said on it already. One problem that does bother me though—and that is how the advisory team to this group was picked. I will use myself as an example, not that it makes a darn bit of difference. But I will use myself as an example because I was nominated and elected by the rank and file members of the Columbia River Fishermen's Union to be their representative on this negotiating team. But another man was picked instead of me. The same thing happened with the Indians.

I talked to George Dicehart, of the Bureau of Indian Affairs, and he said it not only happened with us but it happened with other people, too. The question is how were the people on this advisory committee picked and why were some picked that were not choices of their own people. I think that is something that needs to be checked on. The man we have on there from the gill netters is probably doing as good a job as I would do, maybe better. But that isn't the question. Why should somebody that is picked for the job by their own people be turned down by the brass that picked them. That is a question I would like to see answered.

I won't take up any more of your time here. But we will send you a full statement on some of our thinking and what we think needs to be done, just as soon as we can get it out, in the next few days.

SENATOR PACKWOOD. I want to ask you a question and I want to make a comment first. When you talk about managing the fishery to its optimum use, Oregon is very lucky in the sense of having both forest and fish, which are renewable resources, and properly managed will last forever. There is going to be an honest difference of opinion as to how much is optimum, how much can we produce, how much can we fish without reducing the optimum. I have seen this on the forests for years and we are going to experience it more in the ocean, based on honest differences among the users.

Then you come to a second question, and it isn't so much a difference of opinion as if there is going to be a cutback who is going to suffer, is it going to be proportionate, are others going to suffer more or less? You pretty much say that if there has to be a cutback it should fall more heavily on the recreation industry than the commercial industry.

Mr. BRISTOW. I feel this way, there should be a limited entry in this—what I mean by “limited entry” as far as sports is the number of fish they are allowed to harvest annually. When this punchcard system first started in Oregon they were allowed 10 salmon and 10 steelhead a year. Then after the gill netters were cut down to about 50 percent of their fishing time, it was raised to 20 of each, which didn’t make sense to me and probably never will. But anyway, that is the kind of a problem we have. We do know that there has been quite a bit of sale of sport-caught fish on the markets and on the Columbia River and there are various things like that—and it is impossible to curtail unless you go to a different method of handling it. I personally feel that any sport-caught fish should have a metal tag attached to the tail part of the fish. They have a beaver tag here in Oregon that you put on every beaver you take. I was a trapper for about 30 years, so I understand that.

So if you would, just ahead of the tail, cut a slot in each side of the skin and run that metal tag around through there and bring it up and that had to stay with that fish until it was used up I think you would find less chiseling and if the sport fisherman had to buy that tag—4 bits a piece or whatever—so that it wouldn’t be any burden on the regulatory agencies, I think it would help. At least it would go a long way toward it.

Senator PACKWOOD. I am not quite sure I follow you. You put this tag through the tail of the fish and it follows the fish as far as the fish goes, all the way to the market or the home or freezer or whatever?

Mr. BRISTOW. Well, it keeps a sport fisherman honest, or will help to, is what I am getting at. If that tag is on that fish he can’t take it to a restaurant, theoretically, or to a wholesale dealer and sell it. Some of my friends that buy fish in the market tell me that they have to buy the sport-caught fish to be able to stay in business because they can get it cheaper than they can the regular commercial fisherman’s fish—which isn’t quite right.

Senator PACKWOOD. What you are kind of saying not too obliquely is that a lot of these sport fishermen are in the quasi-commercial fishing business on a cutrate basis.

Mr. BRISTOW. Both out in the ocean and inside waters. I know that some of these—if I wanted to I could name a few names, but I won’t do it. Some of them are my neighbors, so I’ll let it go at that. But the thing is I know that some of these pensioners, after they are retired, they fish every day of the week when it is open, and sometimes you can catch quite a few fish in a day’s time when they are biting good, and some of them aren’t above doing this, so they sell that fish that they don’t want for their own use. That is where the problem comes in.

Senator PACKWOOD. Thank you very much. I appreciate your coming down. Next we will take Art Paquet.

He is not here. Let’s go on to Jene Nordmark. Is Jene here?

Is Craig Marlette here? How about Henry Pavelek representing the Northwest Steelheaders? Good. Come on up here.

STATEMENT OF HENRY PAVELEK, ON BEHALF OF THE NORTHWEST STEELHEADERS COUNCIL OF TROUT UNLIMITED

Mr. PAVELEK. Chairman Packwood, I am Henry Pavelek of Albany, Or and I am speaking for the Northwest Steelheaders Council of

search and other incentives that will permit American fishermen to be the sole harvester of fish in our 200-mile limit. We believe that this will overcome many of the problems that we are talking about today.

We would like to see these councils be given the authority to manage those marine species such as seals and sea lions that are heavy predators on our food and game fish. Seals and sea lions have recently undergone a population explosion as a result of being protected under the Endangered Species Act. We believe there is a need for additional research in the harvesting of these particular mammals and in the utilization of their carcasses. We believe there is a great need for better pollution control in our oceans. We are greatly concerned with ocean dumping of various kinds of wastes and toxins. This is bound to have an adverse effect upon the marine resources. We are very concerned about gear dumping by foreign fleets, particularly of nets that continue to kill and waste fish. We believe that dumpers should be held liable for their deeds.

We are also very concerned about such things as oil spills and the possible impact of mining of the sea on our marine resources.

There is a great need for the protection of our bays and estuaries against filling and developments that are damaging to our marine life. These bays and estuaries are the cradles of life of many of our marine species and we have a relatively small area involved in all of our bays and estuaries in Oregon. There is a need for greater protection to the exploitive harvest of our forage species of fish. Our food and game fish depend upon these forage species for their food supply. We cannot expect to maintain high populations of food and game fish without heavy populations of forage fish.

We need considerably more research on how to manage most of the marine fisheries. We have very inadequate information on most species. We believe more funds need to be appropriated to the National Marine Fishery Service for this research. There is a need for research and funds for the rehabilitation of our streams for spawning and a favorable habitat for fish.

We are very concerned about the adverse effects of the drought we are experiencing presently. It could have a disastrous effect upon fish stocks. It has already resulted in a quite serious fish kill in certain areas, particularly in the Snake River system.

For the safety of sport and commercial fishing boats there is a need for adequate maintenance of existing jetties and an adequate depth of water in the vicinity of the ocean bar at the outlets of our major rivers. For additional safety and adequate dispersal of fishermen there is the need for constructing additional jetties and increasing water depths along such rivers as the Alsea and the Siletz—they presently have no jetties.

Again, we wish to thank you, Senator Packwood, for holding this very important meeting and for permitting us to testify.

Senator Packwood, Henry, you mentioned the Indian fishing allocation. Nobody is blaming the Council for that, they are stuck with the court's decision and they have to allocate what is left. And it isn't just fishing. As you are well aware, there are many lawsuits pending now involving Indian rights—the Passamaquoddies apparently are entitled to half the State of Maine legally. The Department of Justice

seems to confirm that and they are going to pay them several hundred million dollars to get back the State of Maine.

But if, by the time all of these cases have gone through the courts to the Supreme Court, if the Supreme Court holds that most of these Indian fishing treaties are valid and the Indians are indeed entitled to a very large amount of fish would you favor buying them out?

Mr. PAVELEK. Definitely.

Senator PACKWOOD. At whatever the cost, which may be several hundred million dollars.

Mr. PAVELEK. I agree. However, the cost of buying them out should only be for those additional rights they have above the average American citizen.

Senator PACKWOOD. I grant you that. Whatever the price would be is obviously dependent on the Court's decision. When all of these cases are finally adjudicated in the Supreme Court I don't know what the final decision will be. But if they do indeed have a legal right to them, then either they are going to keep them or they can be bought up, I assume, by condemnation, if the Government wanted to condemn. But it would be at a fairly high price.

Mr. PAVELEK. Yes; we concur with this, that if they do have the rights that they should be paid off for those particular rights. We believe, however, that the time has come when this ought to be done so that all the citizens are alike.

Senator PACKWOOD. I think it may have to be done eventually so that we can finally lay the problem to rest. It is never going to be laid to rest until that happens. Let me ask you now this further question of how the sport industry and charter boat industry—if you count that as part of the sport industry—is to be treated, because you heard me say earlier that during the gasoline shortage they wanted to be treated as commercial, they wanted the same allocation of fuel as the commercial fishing industry, and they said they are a business. If that is true—they are a business, there is no question about that—should they then be treated that way when it comes to the allocation of the fish?

Mr. PAVELEK. Of course I believe that the charter industry is a little bit different than either the sport fishery or the commercial industry. They are about halfway in between. I think that they do have a commercial aspect that ought to be recognized, as well as the recreational aspect, because they are providing services to a lot of recreational seekers.

Senator PACKWOOD. You can't have it both ways, you can't be flipping back and forth between commercial for purposes of petroleum and recreational for purposes of allocation.

Mr. PAVELEK. This is undoubtedly right. But there is a distinct difference between them and commercial and sport.

Senator PACKWOOD. I know what you mean. You are talking about the individual sport fisherman with his own little boat and he takes care of his own boat and he is not chartering it out to other people—that is an entirely different industry than the charter boat operators.

Mr. PAVELEK. Yes.

Senator PACKWOOD. Thank you for coming over. Bill Wick, the director of this building that we are in today.

**STATEMENT OF WILLIAM WICK, DIRECTOR, SEA GRANT COLLEGE
PROGRAM, OREGON STATE UNIVERSITY**

Mr. WICK. Senator Packwood and members of the committee, my name is Bill Wick. I am director of the sea grant college program at Oregon State University. I think it is very appropriate, as others have mentioned, that you are meeting on the central Oregon coast, where the marine fishery resource is of dominant interest to both citizens and visitors. I am also happy to welcome you to one of this Nation's more sophisticated university laboratories, a center dedicated to producing knowledge which will be useful in answering some of the questions we are discussing today.

I am pleased to have with me also today several members of the faculty from various disciplines. Fred Smith is here. He is a marine economist; Al Tyler is a population dynamics person in fisheries; Cortland Smith is a cultural anthropologist.

Senator PACKWOOD. Population what?

Mr. WICK. Dynamics.

Senator PACKWOOD. Does that mean how many fish there are?

Mr. WICK. And how species relate one to another.

Senator PACKWOOD. OK.

Mr. WICK. I would also like to introduce Jim Lannon, who is a fishery geneticist. We are still dealing with wild animals out there. As we move down the trail toward increased utilization we are going to reach that point where we must domesticate some of the fishes so that they aren't all Texas longhorns, if you will.

This decade, the last 10 years or so, has been a stimulating and somewhat frustrating decade for those of us concerned with marine research and development. I would like to give two or three examples. Great ideas became laws of the land and then languished for lack of funding. Citizens, with an important concern for the environment, helped to pass laws which were notable overkills. Frustrations over lack of international action led to unilateral efforts to solve crucial resource problems.

But I see signs which hold promise for the near future. I would like to discuss a few of these with you. The Sea Grant Act of 1966 was a bold idea, to attempt to adapt the century-old land grant college principles to the development of marine resources through a threefold approach of research, education, and advisory services. After several years of essentially level funding, the trend is upward. The sea grant idea seems to be maturing in purpose and results and a slight upward trend in funding is noted on the Federal level.

We were fortunate to be one of the first three programs established in the sea grant program in 1968 and became a sea grant college in 1971. Our orientation in sea grant is on people and their linkage with the sea. We are concerned with helping people use ocean resources wisely for economic gain, for recreation and for esthetics.

We try to base our program on four factors: (1) The expressed needs of marine resource users of the State and the region. We try to plan our program with the people; (2) our best estimates of future trends. It has been our experience that when we try to identify needs we are often talking about today's or yesterday's problems as opposed to tomorrow's problems. So we try to get into the futures area; (3) the

talent base of those that are involved with the university or with those that we can cooperate with in agencies or industries or the general public, and (4) available funding.

Based on this kind of an approach, our current program is about 60 percent fishery related. The other 40 percent includes emphasis on coastal zone environmental, economic, engineering, and social questions and public policy analysis.

Senator **PACKWOOD**. Let me ask you a question. You talk about the 40 percent in the economic and social, is that as it relates to fisheries? Would that be part of it?

Mr. **WICK**. The economic and social part of our work in fisheries is within the 60 percent. The economic and social part of coastal zone management, for example, relates to how the coastal zone fits together, coastal government and so forth.

Senator **PACKWOOD**. Are you in a position to present evidence on behalf of the commercial fishermen, as to the economic and social effects of some of the actions of the Council might have on the industry?

Mr. **WICK**. To a limited extent. We have the capability and have done certain studies.

Senator **PACKWOOD**. But Bob Hudson talked about needing 40 Ph. D.'s on those reports. I don't know how many Ph. D.'s you have here.

Mr. **WICK**. A substantial number.

Senator **PACKWOOD**. I am serious. You might be in a position to answer many of the questions, because the Council, in its recommendations, is supposed to undertake the economic impact in addition to the environmental and everything else. You might be a better source for the commercial fishermen than any other single source they could find in Oregon on that subject.

Mr. **WICK**. I agree with you, Senator. In fact we are involved in certain elements of it. We probably have the capabilities to do more than we are doing. We are one of the only universities under the sea grant program that has maintained a continuing program of deep-water offshore research, especially on fisheries questions. This has been a very limited program, but we have continued to do it.

I don't know whether you have had a chance to review the recently completed report to the Congress, the Eastland Fisheries Survey. But I think that this document contained a number of very important, perhaps somewhat parochial, suggestions relative to the development of America's fishery resources. Some of these ideas related specifically to sea grant colleges and their role. I was pleased that a number of these recommendations suggested action in areas which we have emphasized or tried to emphasize through the years, based on available funds and talent. This tells me that our program is at least partially on target.

One recommendation specified that sea grant would serve that national interest better by directing a major portion of its program to production of food from the sea and those areas of activity related to this production. It is our contention that the present program balance that we have here in this one sea grant college, with three-fifths in the fisheries area, is at least somewhat responsive to that recommendation. We plan the sea grant program with people.

An example of how we can respond quickly to needs is this one. We are doing a result demonstration project currently involving two-boat

trawling; that is, two boats dragging one net. It is being conducted with Captains Bob Jackson and Joe Easley, out of Charleston, Ore. Our Marine Extension Paul Heikkila, in Coquille, along with engineer Dr. Ed. Kolbe, who is stationed here at the center, represent OSU. The costs are shared. For example, Jackson and Easley equipped their boats with some rather sophisticated electronics gear which is necessary for that kind of fishing. The results from an experiment such as this are available to anyone who may have an interest. They are non-proprietary.

In this project, by the way, we found it necessary to import a Danish fishing trawl net. The cost of the trawl, brailer, spare netting, and twine was \$6,080. The additional cost of import duty was \$2,374. We recognize and appreciate your continuous concern about this question of import duties on those types of fishing gear not available in the United States. We ran into it head on in this one.

Senator PACKWOOD. That is a longstanding cause that I have undertaken and I hope one of these days to be able to pass that bill. It is almost, in my mind, almost without any justification, because there is very little domestic fishing net industry we are protecting that makes the kind of nets that our fishermen need. At the moment I am kind of locked in a head-on battle with one Senator who does have one of those fishing net manufacturers. My hunch is in the long run we will win.

Mr. WICK. I thought it would be useful just to mention this example. Let me turn briefly to environmental overkill, if I can, at least my interpretation of it. I think that certain laws of the decade have resulted in elimination of what I would call adequate management options. I began my career trapping antelope in Nevada, and in this we utilized wild horse trapping techniques involving airplanes and cowboys. Wild horses and burros in the high desert really damage waterholes and rangelands. The protection offered them in the last few years has increased their numbers—at least if my eyeball estimates are of any value—but I know by experience that these horses can be trapped humanely using available techniques. This option seems to be missing.

What has this got to do with fishing or marine resources? I think that some of the same difficulties exist in the Marine Mammal Protection Act. Management options are lacking. Protection of seals and sea lions on the Oregon coast, combined with low-water conditions, is in our case at least, seriously jeopardizing some important salmon farming research.

In another example, clean-water regulations severely restrict the discharge of seafood processing wastes into bay and ocean waters, even when currents and exchange patterns suggest that these nutrients would be beneficial rather than harmful. I suggest that regulations consider local hydrographic conditions.

Turning to the Fishery Conservation and Management Act of 1976, if I may. After several years of excellent work by the Congress and the people, extended jurisdiction became a reality with the stroke of President Ford's pen. This act changed the face of the globe, as other nations quickly joined the parade. How is the act working? The very fact that the act exists has resulted in greatly increased confidence in the future of America's fishing industry, in my opinion. New capital

is entering the field, new people, some new ideas, new entrepreneurship, and a positive atmosphere, as far as I can judge.

The regional councils are composed of concerned and experienced men and women. The council staffs are hardworking. They have difficult tasks, but work is proceeding.

But I do have some concerns. Council decisions will have major impacts on the economic and social well-being of traditional fishing communities. It may be that we are more concerned with fish than we are with fisheries. Having emphasized maximum yield of fish for so many years, the idea of optimizing yield still has an uncomfortable ring. In the end our decisions must attempt to maintain the integrity of the human resources that utilize the marine fishery resources. Much new knowledge must be generated. This is in relation to ocean fisheries. We just don't know nearly enough. But information about these major species and stock interactions must be obtained in a much more sophisticated and expensive fashion than utilizing existing historical data.

This requires ships. Ship support for these activities is costly. A substantial amount of economic and social information needs to be gathered, including modeling and so forth. Increasing use of university-based research talent is a step in the right direction. We have evidence of that nearly every day. But more of this talent is available and should be tapped.

The council process leaning toward comprehensive management plans must be an iterative activity; that is, it goes through a series of steps, trial and error, if you will, because these are very complex suites of ideas that require tailoring and alteration when the occasion demands.

I am concerned on how to insure increased participation by "lay" citizens who are not what I consider to be "fishing-oriented insiders." I don't mean to deny that experienced fishermen are essential, experienced resource managers all the way. But I believe that if we were to effectively involve lay citizens from all across the country that all of our citizens would become involved in this act and start realizing that our marine fishery resources belong to all citizens of America. I do not believe that is happening now and I don't have any good ideas on how to insure this input. But I think it is important.

Thank you.

Senator PACKWOOD. Bill, I don't know how to answer that last question, because it isn't just fisheries either. You would love to have intelligent outsiders involved in the whole range of policy decisions in areas that they are not particularly expert in, you want to have the benefit of their outside judgment without necessarily being encumbered by having them to be so close to the forest they don't see the trees. Time and again you often do not get people interested in the effects that a highway can have until the highway is going to go through their house and then they become very interested.

Mr. WICK. It is difficult to locate suitable participants. We have been asked, for example, to nominate people for advisory committees and it is very difficult to come up with names.

Senator PACKWOOD. I saw this just a few days ago when I was in Roseberg. The timber people in that area are very concerned about expansion of the wilderness and taking away some of their base for commercial timbering. They are quite concerned that people who were

from far away who didn't know anything about the local area were trying to make decisions for them, based upon facts they didn't know. I reminded them that we had a battle to stop the building of the dams in Hell's Canyon. There had been a tremendous opposition to that bill from the people in Wallowa County because the dams were going to be built in Wallowa County and it would have been a good economic tax base. In a poll that was done throughout the State, in every county—Douglas County, which is Roseberg, voted overwhelmingly to prohibit any dams being built, and thereby diminished the economic base of Wallowa County. I said I would wager that probably Wallowa County would vote to expand the wilderness around Roseberg, for the very reason that they are a long way away from it.

That is an inevitable problem, part of democracy. People who are in a trade or a business or an occupation are more interested in that business or trade or occupation than people who aren't. I don't know if we will ever change.

Mr. WICK. If you have any specific question for Cortland Smith, the anthropologist, or Fred Smith, the economist, concerning social or economic studies, they are available.

Senator PACKWOOD. I may before I am done. I don't think I do right now. Thank you very much.

[The statement follows:]

STATEMENT OF WILLIAM WICK, DIRECTOR, SEA GRANT COLLEGE PROGRAM, OREGON STATE UNIVERSITY

Mr. Chairman and members of the committee, my name is William Q. Wick. I am Director of the Oregon State University Sea Grant College Program. I am pleased to respond to your invitation to testify at this hearing on issues relating to the use and development of America's marine fishery resources. It is appropriate that you are meeting on the Central Oregon coast where the harvest of living marine resources, both commercially and in recreational mode, is a dominant interest of the citizens and visitors. It is also rewarding to welcome you to one of this nation's most sophisticated university laboratories, a center dedicated to producing knowledge which will be useful in ocean resources development.

This has been both a stimulating and somewhat frustrating decade for those of us concerned with marine research and development. Great ideas became laws of the land and then languished for lack of funding. Citizens, with an important concern for the environment, helped to pass laws which were notable overkills. Frustrations over lack of international action led to unilateral efforts to solve crucial resource problems. But I see signs which hold promise for the near future. Let me discuss a few of these with you.

SEA GRANT

The Sea Grant Act of 1966 was a bold idea—to attempt to adapt the century-old Land Grant Act principles toward the development of marine resources through a program of research, education, and advisory services. Nationally, the programs has languished through several years of level funding. But slight increases during the past two years are hopeful omens that the Sea Grant idea is maturing in purpose and results to become the productive cooperatively funded partnership which the Congress envisioned.

Oregon State University was one of the first three programs established in 1968 and became a Sea Grant College in 1971. Our Sea Grant orientation is on people and their linkage with the sea. We are concerned with helping people use ocean resources wisely for economic gain, recreation, and aesthetic values. We are also concerned with developing an understanding and appreciation for how to live with the ocean and how to manage the coastal zone. Although our emphasis is on the ocean off Oregon and on the Oregon coastal zone, we are an active partner in the Pacific Ocean rim community and recognize and respond to regional, national, and international obligations and opportunities.

We are a university and must act and respond like one. Universities educate students. Universities conduct research to expand the horizons of students and to meet the needs of man and society. Extension of new knowledge to all who can use it is a fundamental obligation.

The OSU Sea Grant College Program is based on four factors:

1. The expressed needs of the marine resource users of the state and region.
2. Our best estimates of future trends.
3. The talent base of the university.
4. Available funding.

Based on the above criteria, our current program is about 60 percent fisheries related. The remaining 40 percent includes emphasis on coastal zone environmental, economic, engineering, and social questions; research in areas of public marine policy issues; and education and advisory services related to these vital subjects. We have maintained an active program in deepwater offshore research, especially on fisheries questions, throughout the program's history.

The recently completed Report to the Congress: Eastland Fisheries Survey, contained a number of cogent, although somewhat parochial, suggestions relative to the development of America's fishery resources. Some of the related specifically to the role of the Sea Grant Colleges. I was pleased that a number of these recommendations suggested action in areas which we have emphasized through the years. This tells me that our program is at least partially on target. One recommendation specified that Sea Grant "would serve that national interest better by directing a major portion of its program to production of food from the sea and those areas of activities related to this production." It is our contention that the present OSU program balance, with three-fifths of the effort in the fisheries areas, is responsive to this recommendation.

We plan the Sea Grant College Program with the people. This takes many forms—advisory councils, port committees, personal contacts, conferences, etc. Accurate determination of the needs of the marine resource users is sometimes difficult to achieve, however.

Although much of our program follows a fairly rigid project approach, there are opportunities for rapid response to emerging or critical problems. These special activities can be conducted in cooperation with individuals, industries or agencies. A current example is a result demonstration project involving two-boat trawling being conducted with Captains Bob Jackson and Joe Easley, out of Charleston, Oregon. Paul Heikkila, Marine Extensions Agent, Coquille, and engineer Ed Kolbe represent OSU. The costs are shared. The results are available to all who may have an interest. In this project, we found it necessary to import a Danish fishing trawl net. The cost of the trawl, brailer, spare netting and twine was \$6,080. The additional cost of import duty was \$2,374. We recognize and appreciate Senator Packwood's continuing interest in the question of import duties on those types of fishing gear unavailable in the United States.

In summary, an effective Sea Grant College Program must be attuned to the needs of the region it serves, on trusted terms with the agencies, industries and people that manage and utilize marine resources, and able to provide the research, education, and advisory services required to focus on the top priority problems and opportunities.

ENVIRONMENTAL OVERKILL

Certain laws of the decade have resulted in elimination of adequate management options. Having spent my early career in wild horse and burro country, I recognize the damage which uncontrolled herds of these animals can do to rangelands and water holes. I also know, by experience, that wild horses can be trapped, humanely, through the use of airplanes and large traps. This approach is not permitted, if I understand the law.

Some of the same difficulties exist in the Marine Mammal Protection Act. Management options are lacking. Protection of seals and sea lions on the Oregon coast, combined with low water conditions, is seriously jeopardizing some of our research projects on salmon.

In another example, clean water regulations severely restrict the discharge of seafood processing wastes into bay and ocean waters, even when currents and exchange patterns suggest that these nutrients would be beneficial rather than harmful. I suggest that regulations consider local hydrographic conditions.

FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976

After several years of exhaustive work by the Congress and the people, extended jurisdiction became a reality with the stroke of President Ford's]

This Act changed the face of the globe as other nations quickly joined the parade. How is the Act working? I do not pretend to be an expert on this legislation. But some comments may be of interest.

The very fact that the Act exists has resulted in greatly increased confidence in the future of America's fishing industry. New capital is entering the field. New people. New ideas. New entrepreneurship is emerging. A more positive atmosphere seems evident on all coasts.

The Regional Councils are composed of concerned and experienced men and women. The council staffs are hard working. The tasks which we are expecting them to accomplish are difficult. Work is proceeding. Notable progress, at least in a number of fisheries, has been made.

Yes, I do have some concerns. Council decisions will have major impacts on the economic and social well being of traditional fishing communities. It may be that we are more concerned with fish than we are with fisheries. Having emphasized maximum yield of fish for so many years, the idea of optimizing yield still has an uncomfortable ring. In the end, our decisions must attempt to maintain the integrity of the human resources that utilize the marine fishery resources.

Much new knowledge must be generated. Information about the major species and stock interactions must be obtained in a much more sophisticated and expensive fashion. Ship support for these activities will be costly. A substantial amount of economic and social information needs to be gathered. In some instances, modeling of systems must be accomplished.

Increasing use of university-based research talent is a step in the right direction, but more of this talent is available and should be tapped.

The Council process leading toward comprehensive management plans must be an iterative activity. These complex suites of ideas require tailoring to fit precise needs and yet should be adaptable to alteration when the occasion demands. Is there a way to insure increased participation by "lay" citizens who are not fishing-oriented "insiders?" Involvement of these people would serve to demonstrate that this management act is aimed at proper use of America's marine resources for all its citizens.

Senator PACKWOOD. James Coon.

STATEMENT OF JAMES COON

Mr. COON. I would like to express our appreciation, Senator, for having the privilege to speak before your hearing today. I represent a group of fishermen that are unique on the Oregon coast, in fact unique in the United States, in that the area that I fish in, primarily Pacific City, where flat bottom skiffs fish through the surf on a day basis, and primarily we are something like the guy who is standing on the riverbank waiting for the fish to swim by, because that is what we do. We go out each day and wait for the fish to swim up the coast on their normal spawning routes and hopefully get enough hooks in front of them to catch something.

We have several areas that the fellows have expressed concern about. One was the regional council's decision on seasons. The northern closure not only affected those fellows that were unable to go out in traditional grounds and fish, it affected every other fisherman on the Oregon and California coast, because logically, the fellows that were unable to fish in their own area, had to go to areas that were open to them. Consequently, rather than seeing a normal number of boats in the spring season off the Oregon and California coast, we had many more boats from northern Oregon and Washington fishing in the area because they had no other choice.

A lot of these fellows are top fishermen. If they were really familiar with the area they could catch lots of fish. As it was, they caught their share. But that added pressure made the local fishermen at somewhat disadvantage. If there are a number of fish to catch, the number of

fishermen on that body of fish dictates how many each boat is going to get, more or less. That is one area of our concern.

It has been alluded to in the fact that in essence the salmon industry really doesn't need a season. The reason we say that is that the weather is the salmon fisherman's season. Normally in the winter it is impossible to fish. There are few fish around that are marketable size or of a size that the fishermen would like to catch. Normally the good seasons of the year as far as weather are the good fishing seasons. So when we see closures above us our natural concern is we are going to be next. In other words, that closure is liable to move down the coast and we are all going to be affected, not only by not being able to fish, but by additional boats.

Senator PACKWOOD. Let me ask you something about your previous statement. Are you saying that there is ample salmon industry regulation by nature alone, that it would be sufficient to take care of the catch?

Mr. COON. What I am saying is that the weather season corresponds very closely to the regulated season. So we do not deny that there is overpressure on salmon. However, changing the season dates for one section of the coast really didn't help the conservation of the fish that much, simply because in our area we normally feel that the fish migrate from the southern Oregon area by us to northern Oregon, Columbia River, even some into British Columbia, Canada region. So what the decision essentially did was to put more pressure on the fish before so that in reality you had the same situation.

Senator PACKWOOD. But do you need any regulated season at all, or are you saying that just regulation by virtue of the weather around here is sufficient regulation?

Mr. COON. We feel that regulation by the season is sufficient. However, we recognize that that is not going to happen. In other words, our feeling, unfortunately, is one of not being optimistic. We are afraid that rather than see less regulation we are going to see more regulation. We don't like that idea, but in practicality, we are afraid that is what is going to happen. The reason we really appreciate this ability to respond to you here is that we feel there is too much bureaucracy and redtape and here we have a chance to air from what we feel is a grass-roots level directly to the political level, which to us is very important, our concerns.

As I mentioned before, seasons regulated by weather are going to very closely approximate the seasons regulated by—I shouldn't say now, but before the seasons were regulated—by edict. Another thing that concerned us was the fact that while none of our local boats were involved, there were a number of boats that we were fishing with daily that went up and protest fished. We feel that those people were right. We feel that they were completely frustrated with the decisions that had been made, the blockage of the Alwaco charter harbor. When a person gets his back to the wall there is very little he can do other than fight. Unfortunately, in the past, the salmon trawlers have not been a very highly organized group, very independent people, very proud people to be in the fishing industry, I might say. Most of the boats in Pacific City don't fish year round, simply because we are unable to get out through the surf most of the year—it is just the good times of the year that we are able to fish.

However, I am a third-generation fisherman. My boy, who just started this year, is a fourth-generation fisherman. That is our interest. We are proud to be fishermen. We react strongly when we see that perhaps we are not going to be able to continue the thing that is part of our heritage, the things that are important to us.

I am going to talk about it now—I was going to talk about it later—the idea of limited entry. On a philosophical basis we think it is wrong. We think that in America if a guy had enough initiative to go out and do a little bit of work to better himself and eventually make a better standard of living for himself and his family, the more power to him. Philosophically, we think that is the way America should be today.

But unfortunately, as has been mentioned before, there are people that are abusing, that really aren't out to get into an industry, they are out to get a tax write-off or to catch all the fish they want for fun. We see that that is wrong, too. So in a practical sense we see that limited entry probably is coming, but in a philosophical sense we say it is too bad that America is changing her whole composure when we shut off various segments for the public to get into.

I am worried. I have one boy that is in high school. He just finished his freshman year—he started commercial fishing. I started commercial fishing when I was a freshman in high school—that is 20-some years ago now. But I would like to be able to think that my youngest son, if he wants to go into commercial fishing, he can do it and not go through a ton of redtape to get into it, or have to pay an exorbitant price for licenses or be on some kind of a waiting list to do it.

Senator PACKWOOD. Do you make your full-time living out of dory fishing?

Mr. COON. I do not. My intentions are to eventually make my full-time living by fishing. I teach—and there are a lot of trawlers who say “Oh no, another one of those guys”—but most well equipped boats are beyond the reach of the average American wage earner. My current goal, and the goal of the last several years, is to fish in the summer—and by the way, last summer was a little better than average. I made about twice fishing what I do teaching. So I stick that money away, and I am building a 54-foot boat so that I can go into fishing full time. I would like, and my son would like, to be able to do that also. But most fishermen started with a small boat and through a lot of hard work worked their way up to a larger boat. I would hate to see that method being phased out in our American way of life.

The 200-mile bill we feel was a good piece of legislation. But we think that the American public needs to be informed that all hasn't been done on it yet, that any time one foreign boat takes on foreign fish, that contributes to the rape of a natural resource that belongs to an American. I have never been able to understand why we allowed foreign boats on our coastal waters ever.

Senator PACKWOOD. Should they not even be allowed to take fish that we don't take?

Mr. COON. They should not be allowed to take anything we don't take, because every fish in that ocean contributes to a food cycle, to a food chain.

Senator PACKWOOD. No; I phrased it wrong. If the Commission were “All right, you can fish for hake,” but nobody fishes for hake,

or very few people, then what is wrong with letting foreigners fish for it on a licensed basis?

Mr. COON. Well, when you say Russian boats can take hake, that would be fine, perhaps, if all they took was hake.

Senator PACKWOOD. I understand that problem.

Mr. COON. However, my feeling is if we have a low-grade ore source—here in Oregon if it happens to be copper—are we going to say to the Russians they can come in and mine this low-grade copper resource and take what they want because we are not going to really use that? Perhaps some day we will. I maintain that our ores, that our fish are all part of natural resources and that they belong to the American people, and if there is a resource out there that needs to be harvested then we don't say OK, we are not harvesting it, so Russia come in take what you want. We should say, 'OK, American fisherman, here is a resource, we are going to help you get set up, and let's develop a market, let's harvest the fish, produce fish flour or meal or whatever we are going to produce, and sell it to the Russians, if they want it. That way it provides jobs for our own people and utilizes our own resource.

Senator PACKWOOD. Let me ask you if there is any analogy with Alaska where the principal timber harvesting, principal plants are owned by the Japanese. They were invited in a number of years ago. They provide jobs for the Alaskan economy. We could not get any American plants to go, or American capital to come in. The Japanese came in. Now, is that wrong?

Mr. COON. Yes.

Senator PACKWOOD. So in that essence, Alaska should be left undeveloped?

Mr. COON. No.

Senator PACKWOOD. Well, unless American capital is going to develop it.

Mr. COON. Correct. The reason I say this is North Slope oil has been there a long time, undeveloped. Let's say 50 years ago they had known that the North Slope oil was there. At that time they wouldn't have touched it because it was economically unfeasible to touch it. They would have known the resource was there but there wasn't enough demand to harvest it, or to bring it to the surface. Today there is such a demand for that resource that we will go anywhere that we can go to get the oil.

Senator PACKWOOD. Yes; but you know who one of the biggest partners in the consortium is?

Mr. COON. Yes.

Senator PACKWOOD. British Petroleum.

Mr. COON. Of course. They know the dollar is there.

Senator PACKWOOD. But I mean, we let them come in. The oil actually ought to be sold in the United States, but they were willing to put up a fair amount of money to help develop it.

Mr. COON. I realize that. It is unfortunate that too often foreigners have wider eyes—their eyes are more open than Americans. But I believe that our Government can do an awful lot to encourage and say to a fisherman "here is a resource and we are going to make it easy for you to get into the market and help you to develop it." There

is some potential for the development of new techniques in our own area that fishermen are looking at. The two-boat trawl, the idea that has been working on the east coast where a fellow gets a couple of boats and begins to process his own product, all kinds of ideas that are ripe and waiting, but it takes capital to invest in it, to get started.

Most small fishermen don't have that kind of money. Alluding to the Government loan policy, production credit, and so on, good programs, but I have heard more than one fisherman say it is not worth the redtape, "I'll go elsewhere and try to get my loan there." Unfortunately some of the other sources, small business, require such an amount that that is not what the fisherman wants. Maybe the fisherman wants to borrow \$100,000 and they say their minimum is \$300,000 or whatever. These kinds of problems fishermen run into.

We need some education on other sources, how to get the money, perhaps. But these are the kinds of problems that the little guy—and I consider myself a little guy—run into.

The statement that was mentioned a little while ago was the problem with the American Indian. We also think that it is very unfortunate that a class system has been set up in America. Our interpretations are the judge made a mistake, that the treaties don't say what the judge says they say. But we agree that we have to abide by the law, if in fact the Supreme Court goes along with the Federal decision rather than the State of Washington decision. Then we do feel that the only way out is to purchase the rights that the Indians possess, but as taxpayers we also feel that they should only be purchased once. We hear stories of various Indian tribes that have been reimbursed several times for various rights. We think that a fair and equitable amount should be set, it should be paid once and from that point in that area the American Indian would then be an American citizen like the rest of us.

In fact, we see the judge's decisions have a great effect on what has happened to our fishing season. In other words, his allocations have dictated to the regional council some decisions perhaps they wouldn't have made had it been everybody shares the same rights and responsibilities fishing, if you can't catch enough, then that is your problem.

Not on a Federal level, but on a local level we are concerned with some decisions of local fish commissions, State fish commissions and so on, on changing of stream patterns. The reason I say this, I live on the Wilson River and when I was—my earliest recollections are seeing gill nets in the Wilson. That was stopped about 1948 or 1949—I forget the exact date. But in those days the commercial fisherman in the river was primarily fishing for chinook and silver salmon. Today, the Wilson holds a small number of chinooks, very small amounts of silver salmon, but the State wildlife commission says that is their experimental steelhead stream. We realize that the steelhead fisherman does contribute to the economy a great deal. But we do not understand why if the streams once held good numbers of chinook, good numbers of silvers, and good numbers of steelheads, why the streams should be changed by man's decision to hold more numbers of one type of fish.

Apparently steelhead prey on small salmon and silvers—salmon. I mean chinook—and their eggs. My frustration can be pointed out by a biologist telling me in Tillamook, when asked why we don't plant

some more silverside in the Wilson, his statement was "We'll plant a few more steelhead and that will take care of them all."

Senator PACKWOOD. I don't want you to drift too far from the main point of the hearing. I understand the frustration that you may have with local fishing rules and regulations, but I have a lot of witnesses after you yet to come. So please try to confine yourself.

Mr. COON. OK. The problem in Government control of streams and deciding what is going to run in that stream, Government control and competition in the salmon industry, States selling eggs to our markets, the French have traditionally been a good market, the State selling salmon carcasses that go to the fresh market, problems that are presented to us.

Another one that we see perhaps that regional councils can have some effect on, we know that the Government has been greatly concerned with large corporate farms and the small farmer, trying to protect the small family farm heritage. We see aquaculture, the State allowing big corporations that normally work on a 45-year rotating basis on their forests getting into the fishing industry, beginning to rotate on a 4-year cycle, not having to make a profit. We see that as a direct concern of the commercial fisherman. States selling these large corporations eggs, the large corporations developing the kinds of runs that the State has been able to produce, the runs being sold later, putting the commercial trawler out of business and the commercial gill netter out of business.

These are the kinds of things that we are worried about. Seasons, limited entry, 200-mile regulations, the Indian problem, all of these affect our future and we are concerned about that.

Once again, thank you for the right to appear.

Senator PACKWOOD. From the standpoint both of a U.S. Senator looking at it nationwide and in Oregon, I hope you wouldn't carry this foreign investment thing too far, because it could cut both ways. At the moment a fair portion of the standard of living in this country is dependent upon American investment overseas. If other countries were to adopt the attitude you are suggesting we adopt for foreign investment here, we suddenly would find ourselves woefully short of most of the major minerals that this society depends upon.

Mr. COON. One of the things that I have been reading lately, the possibility of regulation in the fishing industry to control the percentage that a foreign corporation or whatever might own; for instance, apparently there is some loophole that a foreign investment, if they own the company, feel that they could get around the 200-mile limit. This is why the statements I made are so. Thank you.

Senator PACKWOOD. I understand. Thank you very much for coming over. Ted Bugas, are you here? I don't see him. Barry Fisher.

STATEMENT OF BARRY FISHER

Mr. FISHER. My name is Barry Fisher, I am the owner-captain of the steelramp trawler in this port, the *Excalibur*, completed in March 1977. Partly because of the 200-mile bill we expect to start construction on a new vessel in September to be somewhat larger. What this will represent in one roughly 15-month period is a capital investment

in the American fisheries of over a million dollars. I am a member of the bottom fish advisory group to the Pacific regional council. I was one of the national delegates to the Eastland survey, a survey which was earlier labeled by Professor Wick as "parochial"—I am sure that you all well know that the intent was that would be a parochial survey, to go out at a grassroots level, survey the users of renewable fishery resources in this country to get their ideas on what should be done. I feel somewhat, as a fisherman, somewhat amused. It took us 20 years to build—if I may draw an analogy—a swimming pool which contained our renewable resources. I think it is safe to say that the fishermen fought primarily alone for that bill. We now discover that the pool is filled with all sorts of people once the bill has been accomplished who keep urging for greater participation, greater involvement. I believe in these as goals but I am also somewhat concerned about a dilution of the intent by the involvement of so many outside people whose interests are not necessarily for either the preservation and/or the harvesting of the resources.

I would like to thank you for this dialog opportunity. We fishermen have too few opportunities to deal with the Congress. The Eastland survey was one such vital opportunity. When I talk about too few opportunities to deal with the Congress, most of us, I think, regard the legislative branch of the U.S. Government as a friend, the helpful legislation that has helped the American fisheries has come from the Congress. Oftentimes that legislation has been frustrated by the Executive.

If I can carry this analogy a little farther, oftentimes it seems to us that the executive branch of the U.S. Government has almost consistently operated against the best interests of the domestic fisheries. A quick reference in point, many speakers this morning have talked about the need for ongoing fishery research, which I heartily endorse. Very little is known about our resources. There is very little money available. With this scarcity staring us in the face I cannot for the life of me understand why the Office of Management and Budget, for example, has curtailed funds or restricted some of the funds legislated by the Congress for Public Law 88-309. There is currently a block on some of the funds.

I am mystified by the Office of Management and Budget's continual directives to National Marine Fishery Service, which they follow to the letter, not to engage in any aid or development activities for the American domestic industry. We tried to address a great many of these things in the Eastland fishery survey. I feel—and there is one highly interesting thing about this survey, we had both commercial and recreational fishery interests gathered in Washington for 3 days. All of our lives we have been told by Government agencies that it is impossible to come out with national fishery policy because the interests and the areas of the fisheries are so disparate, they are so farflung and widespread that it is impossible to have national fishery policy.

Much to our amazement we discovered an extraordinary high degree of unanimity, not only between different segments of the commercial fishing industry throughout the country, but also recreational and commercial fishermen. There were some issues and there will be conflict areas on resource allocation. But in terms of the kinds of legislation, the kind of activities that are needed by the Government, those

areas Government should be in—and further, those areas that Government should not be in—there was an extraordinary degree of consensus. I only hope that that survey is read and that some of these recommendations are followed upon.

Briefly, these are some of the things we asked for, and I am giving them more for the record than I am for your knowledge, because I am sure you are quite familiar with them. We ask primarily that the American fisherman be treated as a food producer by his Government, he has never been treated as a food producer. We still find ourselves, fishery programs not centralized; we find ourselves attached to an office whose main concern is science, whose main orientation is science, in a department that is devoted to business. As such, it is very difficult for either them or for the U.S. Government to perceive the need for some of the services that we require as food producers.

A simple case in point is market reports. The American farmer receives these all the time. He receives them free, he receives \$5 billion in direct marketing programs from the U.S. Government. We receive neither of these.

I am not suggesting for a minute that we need a big package for market development programs. But we do need some attention paid to this concept that we are harvesting fish and selling it as a food.

We also need an advocacy role. And with all respect, although there are a great many people in the National Marine Fisheries Service who are competent, who do an excellent job, the National Marine Fishery Service does not fulfill this role of advocate. I think that as I go farther through the testimony I am going to attempt to suggest that given the structure of Public Law 94-265 and the other ongoing activities of the National Marine Fishery Service that it oftentimes finds itself in a conflict of interest role.

We recommend primarily, too, enjoying this very heady experience of talking directly to our Government without the interposition of filters composed of self-style experts, National Marine Fishery Service, Government agencies, outside consultants who oftentimes have to ask which end of the fish the tail is on—we like the idea of being able to talk directly, particularly when it involved the proposal of legislation or the carrying out of extant legislation by the Government.

We propose that an Office of Fishery Policy be established as an adjunct to the current House Merchant Marine and Fisheries Committee and the appropriate Senate committee; that this group would be composed of regionally appointed advisers from the user groups, recreational fishermen, commercial fishermen, et cetera, at no cost; that they be a sounding board; and that legislative ideas come from them as well as from other sources. This group would also serve as more or less of an advocate thing. For example, one of the things that bothered me very recently, the recently completed GAO survey on what is needed in the American fishery. That survey used almost throughout—practically its entire data source was National Marine Fishery Service and National Marine Fishery Service statistics.

One of the findings that amused me very much was that not only did they argue for a much more intensive vertical organization of the fisheries from the trawler to the retail distribution point—which to me seems to go against the grain of the idea of the American fisheries, of people starting and taking risks, doing it on their own—but they

also wound up practically concluding that we need more sea-free Pacifics and sea-free Atlantics. I am sure those of you in government will wince when you remember the cost effectiveness of these.

What we do want is this group, I think, could recommend new legislation where it is needed and could also serve as a sounding board, a very quick and active one back to the various user groups when legislation is proposed or introduced. It could serve the advocate role that currently I don't feel we have. It could also perhaps serve as a watchdog or a watchdog role on government activities.

The 200-mile bill has brought us a great many potentials, potential opportunities, also potential confusion and perhaps even harm to the domestic fisheries. For example, I think that the enforcement schemata this summer on both the Atlantic coast and the Pacific coast has worked quite well, largely because of foreign deference, not because of our efforts in enforcement. This is important. The foreigners have shown a great deal of anxiety, so it seems from all I have been able to hear, in terms of obeying the letter of the law, enforcement on this coast, we have had too few observers. We have been faced with the ridiculous prospect of seeing roughly 60 percent of the enforcement activity taken up on manning the iron curtain north of Tillamook Head and too little on the foreign fishermen, on the foreign fisheries. I tried to call a cutter once when we were fishing just off Tillamook Head, 22 miles off, because I felt that Russian trawlers were deliberately going to make sets on ocean perch—which is a species in very critical supply—and it finally took, Senator, my demanding from the Coast Guard the telephone number of your office to put in a marine-operated call, and then a cutter was dispatched with great alacrity—there were two laying less than 20 miles away from me.

Parenthetically I would like to point out that the salmon trawlers did not destroy the rockfish nor the perch nor seriously deplete other renewable resources off this coast. If you examine the record, the bill said—Public Law 94-265 said that the foreigners were going to pay the cost of enforcement or they are going to pay a very large share of it. I am quite sure that if you analyze what is being paid and what it costs, my figures show that less than a third of the cost has been met by the fees charged to the foreigners for licenses and royalties.

This sort of thing has got to change, the housekeeping internally within the National Marine Fishery Service has got to be improved, there has to be a great deal more responsiveness, there has to be a great deal more attention to what the fishery is all about by them. For example, the incidental catch figure on species other than hake that was referred to earlier—yes; it was cut in half, but if you examine that half which is remaining to the foreigners is greater in perch and rockfish than the combined landings of the Washington and Oregon fleet. This is what they are allowed to catch.

One thing that we discovered to our horror, the Bottom Fish Advisory Group, is that in previous years under the bilateral treaties the Russians, the Poles, the Japanese, the various other foreign nations with whom we had bilateral treaties, were not allowed to make directed sets against species in short supply or species that were deemed critical—these primarily are rockfish and perch. They could not make directed sets against them. They could have them as incidental catch.

Under the current preliminary management plan drafted by the National Marine Fishery Service they can now make sets on black cod, on perch, on rockfish, target sets—and they know what they are setting on. I can tell aboard my relatively unsophisticated trawler what I am setting on most times by my fish scopes and my echo sounder. They can now make directed sets on those species. This is something we are going to have to pay very close attention to in next year's management plan.

The other things that concern me in the 200-mile bill is a basic conflict in values between fishermen and bureaucrats which make it very hard for us to communicate. Oftentimes in the past, government has adopted the very wise strategy of allowing token integration in most of these fishery commissions. You get a couple of fishermen there but make damn sure that they don't have an opportunity to say too much, particularly on the final round. For example, I noticed in the Eastland survey, I am quite pleased with it in one sense, but I also note with a fair degree of irony that every negative comment that we made about the U.S. Government, the State governments, the agencies and sea grant was carefully deleted. There are no negative comments in there. We didn't have too many but I would have like to have seen them, just for form, appear.

Senator PACKWOOD. I have to ask you to wind down a bit because we have a lot of witnesses to go.

Mr. FISHER. OK, fine. I'll leave that. The other thing that I really worry about, too, is the fact that currently, in terms of obeying the law, we are second-class citizens in our own country. If I break any of the fishery laws there are no ifs, ands or buts that I am going to be busted—and I deserve that. I want it to be that way. I also want foreigners to live under the same rules. We are second-class citizens. The Coast Guard establishes a violation, it must get permission from State and Commerce before that vessel can be busted. I want that changed.

I honestly believe that the National Marine Fishery Service is in a conflicting role. They are on the one hand council members, they are advocates of their own program. For example, this leads us into a very bad mess vis-a-vis the financing of vessels. The Small Business Administration is a good way to go. Given the capital cost of these boats, SBA may be the only way to go in the very near future.

This boat, my new one [showing a photograph], cost approximately \$275,000; 4 years ago that boat would have cost about \$160,000. The trawler that we are going to build this fall will cost roughly three-quarters of a million dollars; 4 or 5 years ago she'd have cost \$300,000. What we are going to require are programs that require a very small equity participation, NMFS vessel obligation guarantee calls for 25 percent of the equity of the vessel as the investors minimum, plus 8 percent of the cost of the vessel for operating capital. If you have 33 percent, you don't need that program. SBA, by contrast, may be the program.

But there is a conflict. The other conflict role that NMFS I think finds itself in is it is the final sounding board for the Department of Commerce. This may conflict with what is good for the fishery.

Another thing that I am very concerned about is the appointment role to the councils and to the advisory groups. It seems here that Government really does have a stranglehold on (a) who is going to get named, and (b) who manages to get through the appointment process. I would question whether the National Marine Fishery Service should be treated solely as the sole official voice of the U.S. industry. It has had historically and has today poor communication with the fishery. Much of this I think could be rectified by paying some attention to our sincere request that there be an Office of Fishery Policies, or a Fishery Policy Group associated with the House and Senate committees.

One of the principal problems facing us as fishermen now—
 Senator PACKWOOD. Barry, you have to wind it down.

Mr. FISHER. OK.

Senator PACKWOOD. Finish up this point. But we have to get to other witnesses.

Mr. FISHER. Markets—we badly need markets, and particularly in the underutilized and unutilized species. As such, I am unalterably opposed to the Studds-AuCoin bill limiting foreign investment in markets to 25 percent. This is a bad feature. It goes against our policy. Foreigners are willing to invest in the United States now, provide jobs here, provide us with markets. It seems hypocritical to listen to American fish companies who are allowed to go abroad and invest in other climates—my company, for example, has companies in Germany, it has companies in Canada—to freely enter the stream of their commerce and yet at the same time to demand that they be given either a monopoly or solid majority position in the disposition of resources, particularly when they have shown no inclination, very little inclination to move into an open, free competitive stance for those resources, for those underutilized resources.

I would like again to ask the Congress, we want to live by free market rules, we want to invest freely, we want to catch fish freely. We want to catch fish—we take the risks, we don't demand government security. But when you get things, for example, like the recent University of Rhode Island report that shows you that the average subsidy on Canadian fish entering the east coast of the United States is some 30 cents a pound on the product, how do we compete with this.

I would ask you to examine possibly, even though the stance of the Government is for low tariffs and free trade, the effect of continuing to allow subsidized products from subsidized plants and subsidized fleets to enter the United States freely. Canada is already using its 200-mile bill as a weapon to create joint development efforts. If foreigners want the fish they are going to pay for it. I notice no equivalent effort in this country. I think that bill should be used as a piece of—as an economic development plank.

My final point is I would like to see, rather than a system of Government grants and big Government demonstration projects—and above all, big Government studies—I would much rather see a program drawn up of tax incentives to create the capital for the boats and the plants, extend the provisions of the capital construction fund to the plants, perhaps allow accelerated amortization, accelerated deprecia-

tion for companies and for boats that are willing to take a venture into underutilized and unutilized fisheries.

The way to do it I am firmly convinced is with the tax incentives.

Senator PACKWOOD. By and large this has been over the years a much better method of encouraging development than straight-out Government subsidies.

Mr. FISHER. Yes, sir. And when you get also to the planning of programs to exploit these new fisheries, deal the industry in—in fact, make it a mandatory requirement. No more unilateral Government programs. I think that we have a better idea of where we want to go.

Senator PACKWOOD. I am going to have to make it a mandatory requirement to stop you, though.

Mr. FISHER. Good. Thank you. There are some documents here that I brought along. Perhaps you could take a look at them later.

Senator PACKWOOD. We will put them in the record. Thank you, Barry, very much.

[The documents follow:]

NORTH PACIFIC FISHING VESSEL OWNERS ASSOCIATION,

BARRY FISHER,
Newport, Oreg.

AUGUST 11, 1977.

DEAR BARRY: The enclosure is a comparative analysis of a trawl fishery for Pollock in Southwest Gulf of Alaska area, as delivered to the hearings of the North Pacific Fisheries Management Council on August 5 and 6, on existing vessel type with known operating modes:

1. Trawling and delivering to a shore plant.
2. Trawling and delivering to a floating plant.

The analysis is species specific and region specific; and was put together with the advice and counsel of member vessel operators of proven capability and from sources of goods and services, as listed in the acknowledgements on pages 27 and 28. This analysis was initiated and completed by and for the information of our vessel owners and operators, and represents a first step examination of the floater/shore-based comparison.

Some interesting general aspects appear by virtue of the comparison, and they are mentioned or self-evident. However, before broader generalizations are made or fixed conclusions reached, assumptions and alternatives must be identified, weighted, and inserted into the comparison. Many are details, true, but they might have multiplier factors that are significant, like the possible saving of 15 minutes haul-up time between each tow, for 6 tows per day, for 180 fishing days. (Equals 270 towing hours, or 30 days of fishing, times 22 metric tons, equals 660 m.t. of Pollock worth \$80,026.00.)

Elements or details assumed or omitted which affect both sides of the balance sheet do not necessarily affect the comparison per se, the comparative relationship.

However, others may have a multiplier factor. Some other elements in need of examination to round out the total equation are:

1. The amount of the by-catch and its disposal.
2. Detailed analysis of holding time for Pollock on the vessel, effect on quality in respect to end-use (Filets, Blocks, Surimi, etc.)
3. Effect on daily trawling time, if prospecting time is reduced by a fleet keeping continuous contact with the body of fish.
4. Initial gear costs for each mode, maintenance costs, and comparison with pelagic and bottom-trawling technique.
5. Cost of observer on board floating processor to monitor weights and species composition of delivered catch.
6. Different options if operating in the Bering Sea on Pollock; or off Pacific Coast on Hake.
7. Pair trawling applications and effects on fishing power.

8. Energy use and yield efficiency relationship.

Other more generalized implications are:

1. Fisheries management traps; effects on fishing industry.
2. Shore-based and floater-based fisheries management approaches, implications.
3. Implications for Optimum Yield guidelines.

Finally, a pertinent if not major issue may be between floater-based and shore-based fisheries as much as the contention over Joint Ventures.

The effects of existing Joint Ventures at the packer/processor level have not yet been examined in any depth. There is some experience at this level that should be tapped, and the effects of such Joint Ventures on the fishing industry must be assessed.

It is apparent that all the problems have not yet been exposed, and the evaluation following is a point of beginning.

Cordially,

SIG JAEGER,
Manager.

Enclosure.

QUESTIONNAIRE FOR USERS OF FISHERIES TECHNOLOGICAL RESEARCH
DEVELOPMENT

1. Are you satisfied with the current Federal technological program?
2. Have past efforts been effective or not (quote examples)?
3. List deficiencies of current program and suggest recommendations for improvements.
4. What are the short-term and long-term requirements of a technological program?
5. What would be the consequence of termination of the DFE technological program?
6. Do suitable alternative sources of technological information and expertise exist? If so identify.
7. Are you willing to:
 - (a) cooperate with
 - (b) undertake contracts for
 - (c) share costs with
 the Federal Government to achieve technological goals?
8. How do you assess the importance of the technological program relative to other activities of Fisheries Management?
9. General Comments.

PRESENTATION TO THE NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL ON THE
SUBJECT OF FOREIGN JOINT VENTURES BY SIG JAEGER, MANAGER, NORTH
PACIFIC FISHING VESSEL OWNERS ASSOCIATION, AUGUST 5-6, 1977, AT SEATTLE,
WASHINGTON

I am Sig Jaeger, manager of the North Pacific Fishing Vessel Owners Association. We are a Seattle based organization, composed chiefly of King and Tanner crab vessels operating in the Bering Sea region and the North Pacific. Our vessels are representative of the 90 foot to over 120 foot modern steel fishing vessel built for this operating region in the past decade, and account for over 50% of the Bering Sea crab production.

A number of our members are also experienced and successful trawler operators and owners, with crabber/trawler vessels which operate in either fishing mode during the year and appropriate season, some having ownership in upwards of five modern steel vessels.

Since October of 1974 we have been approached by various foreign fishing interests to participate in various joint fishing ventures for various species such as Hake, Black cod, Pollock, and other species presently unutilized or underutilized by the domestic fisheries. We have been and are interested in these proposals as an augmented income-generating activity for our vessels. Negotiations have been interesting, informative, but not yet productive of concrete understandings for several reasons.

Chief among these reasons has been uncertainty as to the magnitude of catch rates; little precision as to ex-vessel price; and consequent uncertainty as to return on increased capitalization of the vessels or of purchasing or building vessels for such an enterprise. At present, most of our existing vessel's operating time is rather fully utilized, and with the yet unharvested potential of other crab species and bottom-fish of the Bering Sea region, it is obvious the present fleet must be augmented in numbers to full-utilize this resource potential.

Particular species, such as Pollock and Hake, for example, represent an approach to fishing not characteristic of the U.S. fisheries. These are high volume, low unit value species, and only isolated domestic fisheries like Menhaden or the Herring fishery for meal and oil are or were in this general category. Another factor with Pollock and Hake, is that they have a very short shelf-life in the fish hold compared to other species, which puts additional constraints on operating modes of the fishing vessels and means learning new techniques of operation.

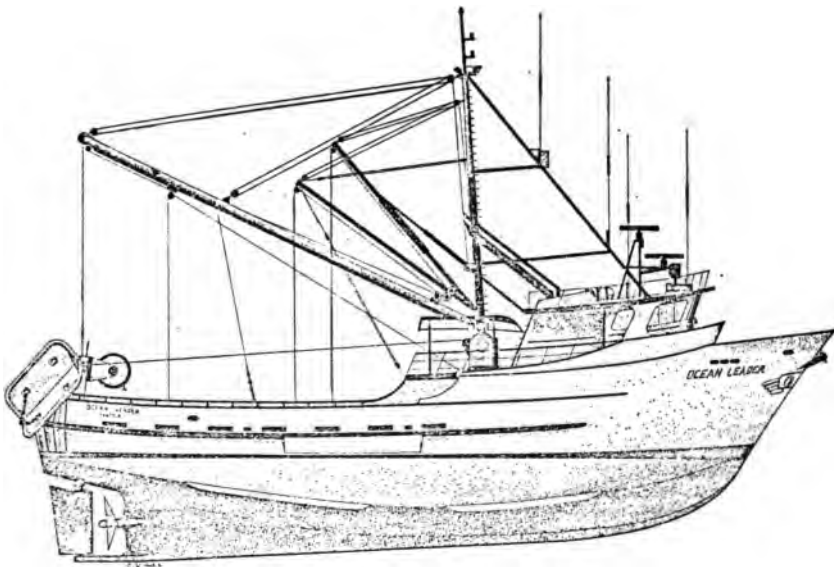
Because of accelerating overseas demand for such species as Pollock and Hake; stimulation of this demand and need by quota reductions necessarily imposed through implementation of regional management through the 200 mile bill, and the consequent right of preemptive access to these resources by U.S. fishermen, the domestic producer has been thrust into a most advantageous negotiating posture in respect to foreign fishing competition.

The numerous joint-venture proposals are symptomatic recognition of that posture, and fishermen like ourselves are carefully evaluating these various proposals. We do not have the advantage of experience in these ventures.

Until now, mutual arrangements with foreign nationals has existed only at the processor/marketing level of the fishing industry. Such joint ventures, though little discussed or examined at this time, are worthy of discussion and examination, at least for purposes of comparison.

The following detailed comparative analysis is of a proposed trawl fishery for Pollock in the South-West Gulf of Alaska, and was prepared for and with the advice of members of our Association, and others, as listed on the attached acknowledgements.

The analysis following is of a trawl fishery on Pollock, using a 120' fishing vessel with 1125 H.P., delivering its catch to a shore-plant, and another fishing vessel with the same operating characteristics delivering to a floating processor.



Ocean Leader, 119'3" x 30'9" x 15'4", built 1974 by Martinac Shipbuilding Corp., Tacoma, Wash. © Ricwalt Pub. Co. 1975

COMPARATIVE ANALYSIS: PROPOSED POLLOCK TRAWL FISHERY, SOUTHWEST GULF OF ALASKA

	Shore plant delivery	Floating plant delivery
1. Operating modes.....	Deliver to shore plant 12 to 24 hr distant from fishing grounds.	Deliver to floating plant on the fishing grounds.
2. Key vessel characteristics..	(A) 1,125 hp, continuous at 1,225 r/min with 4:1 reduction. (B) Auxiliary array, 135 kw capacity minimum. (C) Hold capacity, 8,500 to 9,500 ft ³ , equal to 357,000 to 399,000 lb of mixed iced bottom fish. (D) Trawl size and configuration the same; single trawl.	Do. Do. Do. ¹
3. Crew ²	6 men.....	4 men.....
4. Operating period and days.....	February through November, 303 d less (16 percent) 48 d for adverse weather equals 255 d.	Do.
5. Total annual fishing days ²	108 d fishing (trip, 3 d fishing, 4 d running and in port unloading equals 36 trips).	180 d fishing (trip, 20 d fishing, 7 d running and in port for maintenance and crew rest equals 9 trips).
6. Daily catch rate.....	20 to 24 metric tons; midpoint for calculation is 22 metric tons (48,501.2 lb).	Do.
7. Annual catch rate ²	2,376 metric tons (5,238,129 lb) (fishing days times daily catch rate).	3,960 metric tons (8,730,216 lb).
8. Ex-vessel price.....	\$0.555 per pound (\$121.25 per metric ton). (Note: Price assumed same for comparison of modes; in fact, existing shore plant prices are in the 3- to 4-cent range.)	Do.
9. Gross earnings, annual ²	\$288,097.10.....	\$480,161.88.
10. Operating costs; expendables: ³		
(A) Fuel ²	190,680 gal, at 46.2 cents equals \$88,094.16.....	166,842 gal, at 46.2 cents equals \$77,081.
(B) Provisions ²	6 men, \$10 per diem equals \$60 fishing time plus running time, 216 d of feeding equals \$12,960.	4 men, \$10 per diem equals \$40 fishing time plus running time, 207 d of feeding equals \$8,280.
(C) Crushed ice ²	20 tons a trip, 36 trips, 720 tons times \$20 equals \$14,400.	Not needed.
(D) Total cost of expendables; per year. ³	\$115,454.16.....	\$85,361.
11. Gross profit, for division ²	\$172,642.94.....	\$394,800.88.
12. (A) Man share ²	7 percent a man equals \$12,084.98.....	7 percent a man equals \$27,636.08.
(B) Crew share ²	6 men times 7 percent equals 42 percent crew share equals \$72,509.88.	4 men times 7 percent equals 28 percent crew share equals \$110,544.32.
13. Gross boat share ²	\$100,133.06.....	\$284,256.56.
14. Other boat costs:		
(A) Captain's 10 percent.....	Less \$10,013.30.....	\$Less 28,425.66.
(B) Gear maintenance ²	Assume, \$20,000.....	\$20,000 plus 66 percent more fishing time equals \$33,320.
(C) Net boat share.....	\$70,119.46.....	\$222,511.16.
15. Less estimated annual vessel operating costs:		
(A) Hull insurance.....	\$28,500.....	\$222,511.16.
(B) P. and I. (liability) ²	6 men equals \$9,000.....	4 men equals \$6,000.
(C) Vessel maintenance.....	\$40,000.....	4 men equals \$6,000.
(D) Balance for depreciation, interest on investment profit, etc. ²	(-\$7,380.60).....	\$148,011.16.
16. Addendum: Shore-based vessel with RSW holding system (no ice):		
Ex-vessel price, \$0.055 lb (140 d fishing equals 6,790,168 lb).....		\$373,459.24
Fuel, \$0.462 gal (less fuel costs equals 191,926 gal).....		-88,669.81
Food, per man, \$10 per diem (less provisions 224 days times \$60).....		-13,440.00
Gross profit, for division.....		271,349.43
Man share, 7 percent equals \$18,994.46; crew share, 6 men times 7 percent.....		-113,966.76
Gross boat share.....		157,382.67
Less captains' 10 percent.....		-15,738.26
Gear maintenance \$33,320 over 180 d equal \$185.11 per fishing day (less gear maintenance, \$185.11 per fishing day times 140).....		-25,915.40
Net boat share.....		115,729.01
Less hull insurance.....		-28,500.00
Less P. & I. insurance.....		-9,000.00
Less maintenance.....		-40,000.00
Balance for depreciation, etc.....		38,229.01

¹ Same, but not significant.² Not common to both operating modes.

COMMENTARY ON THE BALANCE SHEET COMPARISONS

The numbers used range in precision from a fixed number such as hold capacity, to mid-point numbers of a range, such as in Item 6 (daily catch rate estimate of 20 to 24 metric tons; mid-point estimate 22 metric tons). Any such errors incorporated on both sides of the balance sheet do not of course affect the comparison because they are shared. The assumptions and rationale for the differences are described briefly and detailed more fully in the attached appendix.

The difference in fishing vessel income generated by the two modes clearly demonstrates that delivering to a floater is a far more efficient fishing mode than delivering ashore. This is most clearly evident in Item 11, where the "Profit for division" between vessel and crew is 128 percent higher for the floater delivery method. To equal this profit level, the shore plant must pay 76 percent more for the Pollock (.042 cent per lb more, or .097 cent per lb against the floater operation price of .055 cent). Without such an adjustment in price, by comparison the shore plan has little or no financial incentive to offer the fishing vessel to compensate for the penalty of inefficiency imposed on it.

It does appear that for this type of high volume, low value species, a domestic floating processor could compete for domestic fishing vessels delivering at sea. Even though the processing costs may be higher compared to the foreign floater, such a floating U.S. processor would have preemptive rights to the stocks of Pollock because it is defined by PL 94-265 as a "fishing vessel". (Section 3, (11) (B))

aiding or assisting one or more vessels at sea in the performance of any activity relating to fishing, including, but not limited to, preparation, supply, storage, refrigeration, transportation, or processing.

Ex-vessel prices for Pollock delivered to an existing U.S. shore plant is in the 03 cent to 04 cent bracket, and the .055 cent used for shore plant delivery in the analysis is a "what if" that does not now exist, and is of little merit for comparison therefore.

Another constraint on fishing time for the shore based vessel (Item 5) is that round Pollock deteriorates more rapidly after 4 days in ice storage, and after 6 days if held in Refrigerated Sea Water (RSW). Quality is not a problem with daily or hourly deliveries to a floating processor.

On-board ice storage limits the trawler to 3 days fishing each trip; allowing 1 day more for running to a delivery port, puts the delivery at the 4 day limit. An RSW system could extend the fishing time 2 more days, but there must be real financial persuasion for a vessel owner to invest another \$60,000 to \$70,000 for such a system, and present income data says "no go".

The example vessels used in the comparison have an earning potential from crab fishing of nearly double the Pollock earning potential of delivering to the floating processor, and in a 7 to 8 month period rather than 10 months trawling for Pollock. Moreover, that crab earning potential is "now", without another \$250,000 invested in trawl gear and winches.

Smaller less expensive vessels, such as existing shrimp trawlers could perform satisfactorily in the proposed Pollock fishery, but reduced horsepower and greater susceptibility to weather constraints would sharply reduce their catch rates below those projected.

Domestic financing for the ventures proposed is not forth-coming, in part, for lack of experience by vessel operators. However, the Koreans, the Japanese, the Soviets, with a long-time experience in this type of at-sea operation, do have confidence in the future of this kind of fishery. Overseas demand is strong and growing. They appear willing to advance fishery expertise, initial operating guarantees, and risk-financing or guarantees, in return for improved access to fish stocks they need now. Their more expensive alternative of a continuance with their fishing and processing vessels within our 200 mile limit will of course exclude any U.S. participation until such time as a joint-venture agreement is consummated and implemented, or until such time as the ex-vessel value of the species rises to a level high enough for domestic land based or floater based delivery and an income potential equal to or greater than existing domestic fishing opportunities.

APPENDIX TO COMPARATIVE ANALYSIS OF A PROPOSED DOMESTIC POLLOCK TRAWL FISHERY, S. W. GULF OF ALASKA, FOR THE PURPOSE OF DESCRIBING AND DOCUMENTING THE RATIONALE USED TO DEVELOP THE COMPARATIVE ANALYSIS

ITEM 1. OPERATING MODES

The comparison between a fishing vessel operating from a shore-based delivery point and delivering to a floating processor while trawling for Pollock was necessary in order to evaluate the income generating potential for each operating mode in respect to the same type fishing vessel.

Delivering to a shore plant, 12 to 24 hours running time from the fishing grounds, involves strapping the fish aboard and icing in the fish hold. This involves time and manpower. Since time is of the essence, such stowing of the fish may detract from the actual trawling time, as does also the period of time required to run in to port, deliver, and return to the grounds. It is estimated that a crew of 6 men is needed, and that a period of 30 to 45 minutes is needed between each tow of the trawl to empty the cod-end aboard, and return to towing. The fish can be stowed and iced in the hold while the vessel is towing.

Delivering to a floating processor, a technique highly developed by foreign fishing fleets, does not necessarily involve the fishing vessel going alongside the processor to deliver. When raised to the surface, the cod-end of the trawl is "unzippered," tied over the open end like a sock, and towed to the processing vessel (or it comes nearby), and the lines are passed to the processor, which takes the fish-filled cod-end aboard either through a sloping stern ramp or by strapping aboard in lifts. Estimates of time lost from trawling to accomplish this are similar to stowing aboard, at the most 30 to 45 minutes, and may with practice be somewhat less, perhaps of a magnitude 15 minutes less between each tow. If so, 15 minutes saved on 6 tows can potentially mean an extra 90 minutes of towing time. To be conservative, it was however assumed that lost time to each day's trawling would initially be the same for both modes of operation. The shore-based vessel will make a trip in 7 days; 3 days fishing and 4 days running or in port, yielding 108 fishing days annually. The floater-based vessel can fish 20 days and go to port for 7 days rest, a common practice among some vessels now, which yields 180 fishing days in the same 255 operating days. The direct result of this difference in fishing modes is visible in Item 5.

Some doubt has been expressed that a shore-based vessel can maintain a two or three day turn-around period in port for the ten month period, without giving the crew an additional rest period (with consequent loss of fishing time) or rotating the crew (with consequent increase in crew cost). Theoretically, the crew of the shore-based vessel will seasonally have 72 days off (in 2 day periods), while the processor-based vessel crew will get only 45 days off, but in 5 day periods. Both down-time estimates are tight, and in reality more crew rest time will probably be made during the operating period, in addition to the unplanned down-time for bad weather. Such arrangements will vary with each vessel operator, of course.

ITEM 2. KEY VESSEL CHARACTERISTICS

Although the Pollock proposal presented by KMIDC specifies pair-trawling as a fishing mode, we have no experience on which to evaluate such a fishing method, and it is most unlikely that both a new fisheries in terms of species and of fishing method can be brought about simultaneously without some prior assessment by existing vessels using existing methods. The twin trawls mounted on outriggers, such as used on some shrimp vessels was reviewed, but although the trawl openings on two small nets is great in comparison to cod-end volume, it was estimated that the anticipated volume of fish to be caught in proportion to the handling time needed for two nets, would not be as productive of holding capacity and minimal down-time as a large pelagic trawl towed by a high horsepower vessel.

(A) Important for comparison of modes is using the one vessel type, with 1125 horsepower, of which presently ten are operational and a number of new ones are now under construction or planned. The reduction gear of 4 to 1 is not optimal, nor is the high-pitched propeller designed for free-running rather than towing.

ITEM 2 (B)

The Auxiliary diesels for driving 135 KW generators are for electrical energy drive water pumps, power for lights and electronic instruments, and to drive

needed hydraulic pumps. Fitting out a vessel for trawling may involve a substantial increase in hydraulic power to operate winches, and this may not be incorporated in all the vessels in the class at present.

(C) Hold capacity varies from 8500 cubic feet for the Marco 108' vessel to 9500 cubic feet for the 120' vessel. Fish holding capacity is estimated at 45 pounds per cubic foot, but in practice 42 pounds of fish mixed with ice, allowing for other lost space, is conservative and workable. The 42 pounds per cubic foot yields 357,000 pounds for the 108' foot vessel, and 399,000 pounds for the 120' vessel.

However, fish holding capacity is not a factor for the vessel delivering to a floater, since it is not required to use the fish hold.

The shore-based vessel, too, may not, it appears, be limited by hold space because of other reasons. Because Pollock does not keep well after four days on the ice, and with the expected catch rates of 22 metric tons per day, this vessel must leave the grounds for port before its capacity is reached. Implications of this are that smaller vessels of the same horsepower could do the job as well at these expected catch rates. But at this time, with no operational experience, it would be risky to build such vessels based on an unrealized potential.

(D) Trawl size and configuration. Since a variety of large size pelagic trawls are used, suffice it here to specify only that the same trawl size and configuration be used for comparative purposes. In practice, each vessel operator will of course modify his net and in addition operate with varying techniques and degrees of success. The same fishing success ratio per tow is assumed for each vessel in both modes.

The pair-trawling method is not evaluated here, but it appears to have real potential in increasing a vessel's fishing efficiency. This technique has a proven value as used in Denmark, and in Scotland. Basically, two vessels tow one large trawl, each attached to one of the two trawl wings. Experience has shown that the combined catch of two such vessels operating in a single trawl mode cannot catch as much as the same vessels towing in a pair-trawl mode. The magnitude of improvement appears to be about 50 percent, and perhaps even more. The implications for improving the performance of smaller trawlers may be very significant. Pair-trawling by U.S. vessels is limited to a few Rhode Island based vessels, and an experimental project presently underway out of Coos Bay, Oregon.

ITEM 3. CREW

Because of the additional man-power needed to stow and ice fish aboard in the large quantities anticipated, the shore-based vessel will clearly need a six-man crew. Some opinions expressed are that seven men will be needed if the catch rate were substantially higher than 22 metric tons per day. Conversely, a four-man crew for the floater based vessel is judged ample, since no on-deck fish handling will be needed. Further, since the crew needs only to set and haul the net, with experience it is believed that even a three-man crew would be adequate. Obviously, the crew size has a large impact on such expenses as provisions and in sharing the divisible surplus after trip expenses.

ITEM 4. OPERATING PERIOD AND DAYS

Although February and March are notoriously bad-weather periods, these months have also yielded some of the highest catch rates, according to foreign sources and U.S. surveillance data. Also, Pollock during this period carry substantial roe, for which there is a market and enhances the total value. December and January are arbitrarily eliminated for reasons of bad weather, holiday periods, annual maintenance and overhaul needs. The operating period could extend into December, or begin in late January. The 303 days is an approximation of the time period, a mid-point. Operating experience in the area has shown that perhaps as much as 50 percent of the time in February may be inoperable, with as little as zero time lost in the summer months. Time lost to weather is dependent on vessel size, and is even more dependent on whether the gear is being fished in contact with the bottom or in a pelagic mode (up in the water). The latter mode could substantially reduce lost time to weather, because fishing gear up in the water will not sustain damage because of uncontrolled contact with the bottom, such as is common with the bottom trawler in bad weather. Fishing time lost will vary from year to year because of changing weather patterns, and also whether by plan or fortuitous circumstance the fishing vessel is in port or at sea during a passing blow. A vessel spending a higher percentage of

time operating at sea may probably be more liable to lose fishing time (such as the vessel delivering to a floating processor). On the other hand, a vessel in port will lose some good weather fishing time when awaiting an improvement in the weather and will waste some of this fishable weather running to the grounds. On balance, the net operating time of 255 days left from a maximum of 303 is a reasonable approximation.

ITEM 5. TOTAL ANNUAL FISHING DAYS

The factors making this determination are, that given 255 operating days after correction for weather, the mode of operating on examination will yield a relatively specific number of days of actual fishing on the grounds.

A major limiting factor for the shore-based vessel is that he must deliver each trip ashore, using some proportion of operating time for running, in-port unloading, and rest period for the crew. Further, the vessel is not constrained by capacity, but by the ability to bring in a catch of acceptable quality for the end product. Blocks and fillets require a higher quality of fish than does its reduction to the shredded flesh commonly called Surimi by the Japanese. Iced fish kept to 4 days is acceptable for fish blocks and fillets. The Hokkaido Pollock fishery brings in iced fish up to 5 or 6 days old, but the principal product is Surimi. U.S. research indicates that iced Pollock for fillets can be kept to 4 days, and Pollock in RSW (Refrigerated Sea Water) may be kept to 6 days.

As a result of this information, a shore-based vessel may fish to 3 days if icing the fish, and will not therefore approach its capacity of 357,000 pounds. Augmenting this by installing an RSW system can extend the fishing days each trip by two, and still not reach a capacity load.

Start-up in the fishery, does however indicate that the initial spread of 108 days compared to 180 days of fishing will prevail. If the shore-based vessel invests in an RSW system it could increase fishing days to 140, with landed Pollock of quality comparable to the iced. RSW systems will require an additional investment of \$60,000 to \$70,000, and fish quality will still not be equal to daily delivery at sea. (See Item 16, Addendum for potential of RSW equipped vessel)

ITEM 6. DAILY CATCH RATE

Selected catch rates by two U.S. research vessels operating in the area concerned, with little experience in the fishery and modest vessel horsepower (327 H.P. to 650 H.P.) have had catch rates that if extrapolated into 9 hours of daily towing, have daily catch rates of from 20.07 metric tons to 114 metric tons. (Average, 52.29 metric tons per day) This catch rate was heavily discounted for several reasons.

- (1) The amount of time spent in prospecting was not accounted for.
- (2) Fishing was on selected schools, highly concentrated.
- (3) Tows were very short, and no full working day comparable to a commercial fishing vessel at work as simulated.

On the other hand, the daily catch rate reported for Soviet vessels operating in the area in a full scale commercial fishery (towing, prospecting, etc.) varied from 10.26 metric tons per day to 30.06 metric tons per day. Their overall daily average for 37 vessel days was 21.6 metric tons. The Soviet vessels were larger BMRT's, with 2000 H.P.

Past comparisons of Soviet fishing with other foreign vessels of like capability, indicate that Soviets are about 26% less efficient, working on the same species, in the same area, at the same time. Catching 21.6 m.t., with a potential then of 29.18 m.t., should make our own highly efficient trawlers capable of equalling or exceeding Soviet catch rates. The estimated catch rate for U.S. vessels with 1125 H.P. is probably conservative in this very important catch-rate segment of the overall calculation, and is based on an estimated daily range of 20 to 24 metric tons. In any case, this daily catch range is identical for both operating modes for comparison purposes, even though not confirmed by fishing experience. (Initial daily catch rates of 40 metric tons estimated in the KMIDC proposal approximated Bering Sea catch rates, not for the area proposed.)

ITEM 7. ANNUAL CATCH RATE

This calculation is a straightforward multiplication of daily catch rate times days of fishing.

ITEM 8. EX-VESSEL PRICE

To preserve the comparison of fishing modes, the price was assumed to be the same. An existing shore plant price in Alaska is in the .03 cent to .04 cent range. The .055 cent price is the one offered by KMIDC: .05 cent on delivery, and .005 cent at end of the season as a bonus. (The additional incentive of ½ cent is not too meaningful now because there is no catch experience for the fisherman to measure this against.)

As an exercise, an ex-vessel price for the shore-based fishing vessel was estimated which would generate a gross profit for division the same as the floater-based vessel. That price is .097 cent, yields the same gross profit for division, but does not yield the extra income needed to pay for the two extra crew members.

ITEM 9. GROSS EARNINGS, ANNUAL

Straight forward calculation of the gross catch times the ex-vessel price.

ITEM 10. OPERATING COSTS, EXPENDABLES

(A) Fuel. Diesel fuel costs are based on most local prices, which in Kodiak is 46.2 cents per gal. Other prices current are; Seattle 38 cents, Sitka 51 cents, Dutch Harbor 50 cents.

Each fishing day is broken down into periods of towing the trawl, engine idling, and engine running free while prospecting for fish. Assuming 18 hours of daily operation: 9 hours is spent towing, 4 hours at prospecting speed, and 5 hours at idling while handling the trawl. Hourly consumption rates are 42 gallons, 33.6 gallons, 5.3 gallons, respectively. In addition, a constant estimated rate of 10 gallons per hour for the 24 hours is factored in for the auxiliary. Fuel consumption for one day of fishing is 778.9 gallons per day.

For a running day to and from port, an average of 18 hours was used at 56 gallons per hour for crusing. Combined with auxiliary engine consumption, the daily consumption rate would be 1360 gallons.

For a day in port (unloading, etc.) with auxiliary running, 240 gallons per day would be consumed as a minimum.

The vessel delivering to a shore plant would annually use fuel at 778.9 gallons daily for 108 days of fishing; 1360 gallons daily for 72 days of running; and 240 gallons daily for 36 in-port days with auxiliary running. Total annual fuel consumption, 190,680 gallons at 46.2 cents per gallon equals \$88,094.16.

The vessel delivering to a floating processor would annually use fuel at 778.9 gallons daily for 180 days of fishing, 1360 gallons daily for 18 days of running; and 240 gallons daily for 9 in-port days. Total annual fuel consumption, 166,842 gallons at 46.2 cents per gallon equals \$77,061.00.

In actual use, considering engine wear through normal years of operation, and subsequent increased fuel consumption relative to horsepower output, a 10 percent increase in the foregoing estimates would yield a more accurate estimate. Experience in operation has demonstrated that the theoretical fuel consumption curves are exceeded by 10 percent to 15 percent while under various loadings. A 25 percent increase over the theoretical fuel consumption while towing was added to the towing hours only, which represents 14 percent of the fuel consumption for the shore-based vessel, and 27 percent for the floater based vessel.

(B) Provisions. Per diem cost to feed one man has been computed at \$10.00 per day, and that is based on a complete provisioning at Seattle prices for the fishing period. Such daily costs may vary considerably from boat to boat, depending on the number and amount of specialty items ordered according to the tastes of the crew. The \$10 figure is minimal. Present costs are running over \$15 per man on some vessels. Provisions purchased in Kodiak may be at least 25 percent higher than the estimate given.

The crew is usually fed on the vessel while fishing and running to port. They may or may not eat on board while working in port, and this could depend on a convenient restaurant.

(C) Crushed ice. The ice cost estimate is modest. Since cost per ton and volume per ton varies from port to port, the 20 tons per trip is minimal for the amount of fish to be iced, Ice recently frozen (green ice) does not hold as much cold as old or seasoned ice. Also, the size of the "ton" varies whether it is flake ice or ground ice. Vessels have noted that the tons of ice per trip required may almost double, depending on where purchased. To ice 200,000 pounds of bottomfish, 40 tons per trip could be required, depending on where purchased.

RSW (Refrigerated sea water) systems cost \$60,000 or more, and it is not like that such a system will be installed on speculation based on an unproved potential. Experiments with RSW indicate that it has superior keeping qualities to ice, with less labor required.

The floater-based vessel requires no holding system such as ice or RSW, since the fish goes directly from the net each tow to the processor vessel.

(D) Total cost of expendables; per year. The \$30,000 extra cost for the shore-based vessel may be partly reduced by eliminating ice and replacing with a lower operating cost RSW system. Since RSW permits a longer fish holding capability, the fishing days per trip could be increased from 3 to 5 days, and thereby increasing the annual fishing days to as much as 140 days. This would still require another 28 percent increase in fishing time to match the 180 fishing days of the floater based vessel, and it is speculative that there would be any enhancement of fish quality.

ITEM 11. GROSS PROFIT, FOR DIVISION

The amount of money remaining after trip expenses to be divided between vessel and crew. Some share systems require the crew to pay for the groceries out of their share, but under such an arrangement the crew member may receive more than 7 percent. However it is done, no matter what the share system formula, the only divisible amount to be shared as profit is the balance left of the gross stock after the expendables (trip expenses) are taken out. The variance of divisible profit is the key amount, "what it is all about." \$172,642.94 shore-based compared to \$394,800.88 for the floater based vessel.

ITEM 12.

(A) Man share. Each man in this example receives 7 percent of the divisible profit. Some share systems designate a total fixed portion to the crew, as a percentage of the Gross stock or of the net stock after paying trip expenses. The 7 percent here is modeled after crab share systems.

(B) Crew share. The man share multiplied by the number in the crew illustrates the total labor cost in percent of the divisible profit, 42 percent compared to 28 percent for the floater-based vessel.

ITEM 13. NET BOAT SHARE

The net amount left to the boat for other traditional vessel costs such as Captain's commission (usually 10 percent of the boat share), gear maintenance, as in Item 14.

ITEM 15.

Estimated annual vessel operating costs. These are variable costs.

(A) One operator may negotiate Hull insurance for as little as 1.7 percent of vessel value, another may not get his insurance for less than 2.5 percent.

(B) Similar negotiability exists for P. & I, though the negotiating range may be narrower.

(C) Vessel maintenance cost varies considerably from vessel to vessel of the same size. Quality of care varies from owner to owner. Engine overhauls are costly, and must be prorated into the annual cost. Proper maintenance and rational use may prolong the engine hours between overhauls as well as reduce the overhaul costs. These items are competitive between boat owners and proprietary to some degree. The numbers presented here are "ball park" approximations volunteered by owners of several vessels. The variance in cost could be 20 percent to 30 percent over all vessels in this class.

(D) Balance for: Depreciation, Interest on investment, profit, etc. Owner equity in the vessel varies considerably, and fixed requirements on loan interest and payments on balance-owing vary inversely to such equity. Crab Vessels built three years ago at \$900,000 complete with fishing gear, now cost \$1,500,000. The value of the vessels has appreciated so that the same \$900,000 vessel now has a resale value of over \$1 million, so that previous depreciation schedules and expected profits are no longer operable. The net amount of \$148,011.16 may have been adequate for the \$900,000 vessel as a 16 percent net return, but the same amount for the same vessel at a cost of \$1,500,000 is little incentive at 9 percent net return.

As a final comment, no attempt has been made here to compare the cost of the same vessel type rigged for trawling and rigged for crabbing only. All gear a trawler configuration (50 percent more power, additional electronics and

STATE OF OREGON
SOUTHERN OREGON PRODUCTION CREDIT

Mr. Zapell, I am sure that you are familiar with the fact that I have been of help to you in many ways in the past. I am one of the many farmers who have been helped by the program. I would like to give you a letter from The Farm Credit Act of 1916, which enabled the PCA to make loans to finance the harvesters and producers of aquatic products. Evidently there was quite a need for assistance to the commercial fishermen, as we have made approximately one hundred

STATEMENT OF STAY ZAPPELL, SOUTHERN OREGON PRODUCTION CREDIT

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for in excess of \$16.5 million. These loans involve the smaller crab, tuna, and salmon trollers, and the shrimp boats and the drag boats.

Our requirements presently are that the owner, the applicant, have a 40-percent equity in the vessel, and our loan repayment is over a 7-year period.

Senator PACKWOOD. When you say 40 percent, he must be able to pay 40 percent down.

Mr. ZAPPELL. He either pays 40 percent down in cash or has a 40-percent equity in other aquatic products such as a second boat and so forth.

Senator PACKWOOD. Can many of them meet that standard?

Mr. ZAPPELL. I have made 550 loans. Also, one of our requirements is that he show us 3 years income tax statements, indicating that he is a professional fisherman. This eliminates speculators and other people that we feel will compete with the family for the family fishermen.

Senator PACKWOOD. Earlier Bob Hudson made reference to it and some others. Are there people getting into the commercial fishing business in fair quantities using it for a tax write-off?

Mr. ZAPPELL. Yes, sir. But not through my PCA.

Senator PACKWOOD. I understand that. Not with the regulations you have just indicated. I mean there are wealthy people buying their own boats—they can afford it—and using the loss as a tax write-off.

Mr. ZAPPELL. Yes. This policy is proving burdensome for the size of the loans we are making now, as the operating expenses increase and the more sophisticated gear continue to take more and more of the cash proceeds. Because of the problems they are all speaking of in the salmon fishery, 20 percent of the installment payments on our loans to salmon trollers are now delinquent.

With the prospect of the U.S. fisherman entering the mid-water trawl fishery, there will be a need for much larger boats and more expensive equipment. It is difficult to see how under our present farm credit regulations, how the U.S. family fisherman can obtain the amount of credit needed and services on a short-term basis.

The Farm Credit Administration District Board has made a determination to strongly support legislation to increase our repayment period to 15 years. This requirement, of course, will require an amendment to the present Farm Credit Act.

Barry mentioned the Small Business Administration. We are presently working through Jobs in Industries in Southwest Oregon and through the Small Business Administration to put together a package where the Small Business Administration accepts the second mortgage and we are the prime lenders.

Where I differ from Barry is that the loan requires a fisherman to make a small, 5-percent downpayment. It gives him 15 years to pay off the loan; however, with payments at nearly 100 percent, if he has any breakdowns causing downtime during the season, payments on a 100-percent loan might prove quite difficult to make.

I as a credit manager do not believe that a small downpayment on the size of the loan required to purchase and maintain a vessel engaged in midwater trawl or those fisheries requiring larger vessels is the answer. I feel that the professional commercial fisherman can handle a larger downpayment, say 25 percent, and more effectively manage his business if the loan is made over a 15- to 20-year period.

Mr. JOHNSON. I think the amount for them to operate should be limited—the amount of investment in American processing should be limited, which I will get to in a moment. I think it should be limited to 25 percent.

STATEMENT OF WALTER JOHNSON, CHIEF, BACALCO, INC.

Mr. JOHNSON. I think the amount for them to operate should be limited—the amount of investment in American processing should be limited, which I will get to in a moment. I think it should be limited to 25 percent.

These are the things that are going to be done in the future. The amount of investment in American processing should be limited, which I will get to in a moment. I think it should be limited to 25 percent.

Senator PACKWOOD. What is the matter with allowing American processing facilities?

Mr. JOHNSON. I think the amount for them to operate should be limited—the amount of investment in American processing should be limited, which I will get to in a moment. I think it should be limited to 25 percent.

Senator PACKWOOD. You operate overseas in five countries.

Mr. JOHNSON. That is correct.

Senator PACKWOOD. But you don't think

Mr. JOHNSON. We sell our product worldwide. We market it on a worldwide basis.

Senator PACKWOOD. Why shouldn't foreigners be allowed to come here and fish and market?

Mr. JOHNSON. I think they should be allowed to come and sell their products here. I have no

Senator PACKWOOD. But not own the processing plants, or very limited in the amount of processing plant.

Mr. JOHNSON. I feel it should be 25 percent ownership.

Senator PACKWOOD. Should that same requirement apply to our fishing processing plants overseas?

Mr. JOHNSON. If that's the way the country feels, each country I think—then that is what we would have to live with. This is my personal feeling that that is what it should be here. Another method is for foreign-owned factory ships now operating under permit with their own foreign fishing boats within the 200-mile limit to buy fish from American boats. Under this scheme, the catch from American boats will not count against their quotas.

I believe that allowing this activity circumvents the intent of the Fisheries Conservation and Management Act. It could stop the increased development of our fishing industry. I am not alone in this belief. The Fisheries Conservation and Management Act set up eight regional councils to advise the Secretary of Commerce in the management of these fisheries resources. When the North Pacific Fisheries Management Council was presented with a plan by a Korean company to take U.S. fish caught on the high seas and avoid having this product count against their quota, the Council on April 28, 1977, turned down the plan by a vote of 6 to 2. On June 13, 1977, the Pacific Council in Los Angeles, by a vote of 11 to 1, turned down an application by a Russian ship to do the same thing.

There are also numerous fishermen's organizations that oppose these types of arrangements, too. Some of them are the Alaska Shrimp Trawlers Association, the Fishermen's Marketing Association of California and Oregon, the Fishermen's Union of San Pedro, the Fishing Vessel Owners Association of Seattle, the Pacific Coast Federation of Fishermen, the Vessel Owners Association of Washington, and the United Fishermen's Association of Kodiak.

The procedures that I have talked about have the effect of passing a resource that could be of vital economic and strategic importance to us into the hands of others. The passage of the Fisheries Conservation and Management Act of 1976 was only the first step to achieve many opportunities. The implementation of rules and regulations that are being formulated in the executive branch of the Federal Government will dictate whether or not the U.S. industry can fully develop and whether these opportunities will be fully realized by us.

I specifically would like to see the Federal Government limit the amount of foreign investment in U.S. boats and plants to 25 percent. I would like to see that as the U.S. industry grows and has the intent to harvest a resource that the U.S. industry be allowed to grow and market this resource worldwide. If not, that we make sure that we manage this resource so that whoever does harvest it, it is harvested in the manner that we deem is proper and right.

I would like to see the Federal Government extend their loan programs and also tax programs so that both American fishermen and processors can attain the necessary assistance to make the capital outlays that will be necessary in the coming years. I also would like to believe that through our Advisory Councils as set up by the Fisheries Conservation and Management Act that the Federal Government will listen to them so that needed research and development can be directed in ways deemed useful by the industry itself.

Senator PACKWOOD. I am confused about this investment thing again. I don't follow your reason for limiting the percentage of foreign investment.

Mr. JOHNSON. I would like to see, in my way of seeing it, I would like to see this product handled by shoreside facilities. I feel for the overall good of American industry we should have American boats, processed on American shoreside facilities, with American labor. I think our ultimate goal, if at all possible, should be pointing in this direction.

Senator PACKWOOD. What I am curious about is the foreign investment on the shoreside facilities. Here we've got Volkswagen coming to Pennsylvania with about a \$700 million plant which will employ 12,000 people, and either Datsun or Toyota is going to open up in southern California, Volvo is going to build in Virginia, Phillips of Holland—which is the inventor of the tape cassette—employs 31,000 people in this country—Norelco is their most famous product here. We bent over backward to attract this foreign capital to come to this country. I don't see why we don't do the same thing in the fish processing industry. Ask them to open up processing plants, put their capital into it.

Mr. JOHNSON. I don't think that we should take their capital out completely, but I like to think of the fisheries industry and our resource as a protein source that should be looked at as a natural resource and therefore that we should keep control of it.

Senator PACKWOOD. How do we lose control of it if a foreign country comes over here any more than we lose control of it when Volkswagen comes over here? They have to pay our wages, and the fellows have to join the unions here and they have to follow our OSHA restrictions. How do we lose control of a plant built on our shores here just because the capital happens to come from Japan or Saudi Arabia?

Mr. JOHNSON. As long as we are able to make the business decision we don't lose the control. I feel that whatever company makes the business decision has the ultimate control of the plant.

Senator PACKWOOD. Obviously the business decision you are going to make is to try to make the plant make money, the same as an American owner would. You have to assume that is what motivates plant-owners.

Mr. JOHNSON. Well, yes.

Senator PACKWOOD. What is the harm? I don't grasp the harm. Who is injured?

Mr. JOHNSON. I think we should look at our fisheries resource as a natural resource and that we should limit the amount of foreign investment in it, the same way we do in our oil, like you talked about earlier about on the North Slope. British Petroleum is involved in it, you said, but they are not in control of it. I would assume, the same way that I would feel like our resource should be—

Senator PACKWOOD. British Petroleum has a whale of a big piece of the action on the North Slope. Every businessman I have ever run across is in favor of free enterprise except for their business, and then their business has unique problems. This is not new to me, I have learned this over my years in politics. Apart from the competition angle, where is the harm to America by a Japanese company building a fish-processing plant at Charleston or Astoria, or here?

Mr. JOHNSON. And using our labor and all of our—

Senator **PACKWOOD**. They aren't going to bring in their nationals to work here. They have to use our labor, they have to use our construction companies to put up their plant, probably contract out the janitorial service to American janitorial companies.

Mr. **JOHNSON**. I believe that the object of this Management Act was to help stimulate American investment and American business to handle this resource, therefore that since we are proceeding in that method I think that is the way we ought to keep going. Maybe that will be one of the options, but right now we should look at it as a resource for Americans and proceed in that manner.

Senator **PACKWOOD**. I have no other questions. Thank you. Don Christianson.

STATEMENT OF DON CHRISTIANSON, MEMBER, SALMON ADVISORY COMMITTEE

Mr. **CHRISTIANSON**. Mr. Senator, I am kind of between trips here and I am not too well prepared. I won't take much of your time. The one thing that stands out to me as a member of the Salmon Advisory Committee to the Regional Council is the fact that all during the formation of this National Marine Fisheries plan and Council and so forth, many of us were involved in the deliberations and the work of putting it together. The effort all the way through was to keep big government out of it. But I realize that is kind of difficult and there has to be a Government control on the international waters or whatever you might want to call it.

But it has developed now—and perhaps it will change in the future, I don't know. The Regional Councils are made up of very capable, experienced people, in most cases—I imagine that like in any organization there can be a bad apple occasionally. But these people in general are experienced and very capable. Their advisory committees are also picked right out of the field of the experienced people. It seems to me that they should be capable and allowed to form these regulations and plans and so forth themselves without interference from the Department of Commerce and the National Marine Fishery Service. I can see where they would be valuable to assist if it is needed, but when they have the final, absolute say and can overrule anything the Council does, I think it puts the Council in the position where they are nothing more than a glorified advisory committee to the Department of Commerce and the National Marine Fisheries Service.

The advisory panels to the Council then are so far down the list that they are practically useless. Up to this point we have been nothing but a reaction group, not an action group. We are doing what we can to change that so that we can get involved in these plans more so than we have been. But it seems to me that these people on these Councils with their advisers should be in a position where they are the boss. We are the people that are working with these resources here. It seems to me that the Department of Commerce now is in the dark about the Pacific coast. They have to keep coming out here with people to find out what is going on. Yet they are the ones that have the final say.

Senator **PACKWOOD**. What you are saying is for better or for worse you would be willing to live by the decision of the Council.

Mr. CHRISTIANSON. Certainly. I think they are perfectly capable of doing these things and they should be allowed to.

Senator PACKWOOD. If they close charter boat fishing for June and July you wouldn't come to me and complain about it?

Mr. CHRISTIANSON. Well, we have representatives on that advisory panel. If we feel that that is the thing to do I am sure that that is what we would do. We have to go along with conservation and propagation of these things. We understand that. We are willing to cooperate the best we can. We don't want to go broke, that's a cinch. That is another thing. I understand there has been some talk before about one thing about why don't the charter boats get restricted like commercial people do.

Actually, what restrictions were on the commercial people except north of Tillamook Head? After all, it seems like every time sport fishing is mentioned the charter boat is pointed out as the big meany, right now. If you go out there with me today, I will show you 23 charter boats and I'll show you about 700 or 800 private sport boats. I will show you a great percentage of them that are cheating—

Senator PACKWOOD. You mean the private sport boats?

Mr. CHRISTIANSON. Yes; and there is no enforcement.

Senator PACKWOOD. Cheating how?

Mr. CHRISTIANSON. By using, for example, too many lines. That is the main thing. Of course there are limit violations also involved in this, because the enforcement is so slack. Yet the charter boat is the big meany. He is the fellow that is really under the control of the State and the Federal Government when it comes to licenses, limits, regulations, rules. We don't dare violate that stuff or we lose our license, we can lose our licenses.

We would like to be recognized—not necessarily as commercial. We don't care what you call us, just recognize us as a legitimate, necessary industry and give us some of the same breaks that other people get.

Senator PACKWOOD. Thank you. I don't have any questions. Arvie and Ed Freeman? Are they here?

Here are some others that added their names and wanted to say something. I will call them in the order they are on here. Forrest Mueret first.

STATEMENT OF FORREST MUERET

Mr. MUERET. There are materials in an envelope there that I would like to have you have. Thank you, Senator Packwood for this opportunity. You might realize better how happy I am to be able to talk to you a few minutes if you realize first I am 200 miles from home and second I made several attempts to see you in Washington, D.C., without getting the job done.

Senator PACKWOOD. I apologize that you didn't get to see me. I have requests for about 40 appointments a day. I cannot see 40 people a day.

Mr. MUERET. I do understand the problem. Maybe one of the reasons for my regard for you is that I am also one of those endangered Republican species. That access is a serious problem. I don't know what I would do to correct it, so I won't say very much about it, except to say that I wrote a letter to you—and I also know you can't read all

your letters—but the answer I got back was one of those computerized phony jobs which said the problem was being studied and hearings would be held. I wrote you several more letters and I carried nine pages to you when I testified before the Senate committee, and then a couple more letters, and then I got another of those phonys like the first one.

Senator PACKWOOD. I don't care what you want to call them, but they are not computer letters. We don't have a computer. They are actually typed on a typewriter. They may not have been responsive to what you wanted to know, but I can assure you that they weren't put out by a computer.

Mr. MURER. OK. This is not really the issue I came to settle.

Senator PACKWOOD. I hope not.

Mr. MURER. But it does point up the reason why I would like to have your attention at this time, which I am sure I have. Do you have there the envelope of materials that I gave to you?

Senator PACKWOOD. My aide does. I don't have it here in front of me.

Mr. MURER. Among it is by the Oregon Attorney General's Office, "Potential Results of H.R. 7259." I am not going to take the time to read that thing or anything like that, but I think it should be pointed out that this shows why we are eternally losers in court here in recent years—also, the book that Henry Pavelek gave you that covers all of this thing, that will show you that for example repeatedly both the Congress and the courts said and intended that the States should have control over this natural resource, the living natural resources.

It also shows how many times the BIA and the Department of the Interior tried to thwart that before they were eventually successful.

Sportsmen who—well, in the first place when the thing we refer to as the "*Bolt* decision," sportsmen who attend that trial tell me that there were 23 U.S. attorneys involved in that.

Senator PACKWOOD. I want to stop you just a minute. I don't want to go into the "*Bolt* decision" or what the Supreme Court will eventually do. We will have to live with it when they do it. But I would like you to bring your testimony down relevantly to what we are here hearing today. It isn't that decision.

Mr. MURER. All sources of fish are very important to the Pacific Management Council, very important—and that is one of them. Of course, this takes out a big hunk to start with. Pardon me for—

Senator PACKWOOD. I don't like the decision any better than you do or most of the others here.

Mr. MURER. I trust you don't.

Senator PACKWOOD. We either live with it or buy out the Indians rights.

Mr. MURER. My reason for mentioning it is what we are going to come up with here in this Soletz thing that has just passed the Senate. I am very seriously concerned that we have been sleeping and possibly our legislators in Washington have been sleeping along with us. They are going to catch some hell when we wake up and see what they are doing to us. When I say "we" I mean the great body of—this book, "Potential Results of H.R. 7259," will discuss that more intelligently than I can. Please read it through.

Senator PACKWOOD. Thank you.

Mr. Mueret. In addition to that, I have two other matters of concern, one a matter of gravel removal immediately below the John Bay Dam, which was important to the ocean fishery and all other fisheries. There is a copy of an application, notice of an application. That is the only spawning ground—they tried to minimize it, but it should not be minimized—below that adjacent to the dam that was dried out here last spring and caused all the fuss. The third thing is we would like to have the John Day River included in the national wild and scenic rivers. That is an important source of fish and we would like to have it locked up as such.

Some of the things I am about to say here may be less palatable to some of the people. I do represent sportsmen principally. I am Forrest Mueret, legislative director for Save Oregon's Resources Today and the national director of Trout Unlimited. You may know that directors are all past or present officers of the leading sports and conservation organizations in the State of Oregon. While not directly attached to any of those organizations, SORT serves as a common forum and very accurately reflects the views of all of them.

SORT was organized to make steelhead a game fish in Oregon, which was accomplished by approximately a 2-to-1 victory in the polls. Since more than half of all adult Oregonians are licensed sportsmen, it therefore follows that so also are more than half of Oregon's voters—Oregonians, that could be—voters. More than half of Oregon's consumers, taxpayers, and assorted other categories are sportsmen. Sportsmen also contribute five times—and this will be argued but it can be verified by the records of the business management of fish and wildlife—sportsmen also contribute five times as much to Oregon's fishery budget as all other users combined, while taking less than one-fourth of the fish—actually 78 percent. In fact, we contribute 36 times as much in fees per pound of fish taken as does the commercial fisherman, and we outnumber him 150 to 1. We are also the only user that accepts regulations without resorting to suit or threat of suit—we wonder if this is why we find ourselves with such a pitifully small representation rather than the majority our numbers and investment would indicate, on all boards, committees, and commissions set up by the Congress or other Federal agencies to ponder or regulate the fisheries.

You may not realize that sport fishing license sales alone very nearly equal the gross receipts of Oregon's commercial salmon fishery, including Indians. Most sportsmen spend more than 100 times their life of cost in pursuing the sport. Our service and supply industry simply dwarfs the commercial fishery and their buyers and suppliers.

This is a thing some people may argue, but consider that a sportsman pays \$11 for a license, including a salmon tag, and then he buys some kind of a pickup and camper or motor home, running somewhere from \$10,000 to \$30,000, and boat and other things to pursue that sport, and if he has really amortized all those investments he is a big spender—close to a billion dollars in the State of Oregon. He is not credited with all of that.

We will never have meaningful regulation of the fisheries until our management councils and so forth are manned by those who believe in meaningful regulation rather than those who oppose it. Fisheries can hardly be meaningful unless they apply first and mo

appear to think that the status of the note on their boat rather than the status of the fishery resource should determine the length of the season.

There are enlightened commercial fishermen who know that the industry is not capable of biting the bullet sufficiently to deal with increasing pressure on a diminishing resource. The resource will always be in trouble until the majority of the controlling agencies come from those without serious financial conflict of interest. The principal reservoir of such people is to be found among the sport or personal use fishery. We feel that better use should be made of that reservoir.

We strongly support the 200-mile concept. We believe that fish should belong to the country of origin, that fishing for personal use should be recognized as the oldest and the highest tradition—even the mink does it—and that all should be able to participate equally, including the disadvantaged majority. We hold that no individual should be entitled to more fish than any other, regardless of race or vocation, and that all who support the resource by buying a personal use or sports license are entitled to first priority to a reasonable limit. Those who seek more than that should be entitled only to those fish that are unavailable to or surplus to the personal use fisherman.

Senator PACKWOOD. Let me make sure I understand what you mean by that. First we will determine how many fish are available that can be harvested on what we call in forestry a sustained yield basis, and no more than that would be caught and then, after you have determined that, the first allocation will go to what you call personal use fishery.

Mr. MUERET. Actually the first to perpetuation.

Senator PACKWOOD. Right.

Mr. MUERET. And then to personal use.

Senator PACKWOOD. And then only third to those who catch fish for food for others.

Mr. MUERET. Right. I have already pointed up that sportsmen are more than half of the consumers.

Senator PACKWOOD. But for those who don't fish themselves and would like to eat fish, they are only going to get it if all of the personal use fishermen get their fish first, and if you don't fish yourself you may be out of luck.

Mr. MUERET. If the fishery means as much to you as it does to me you will.

Senator PACKWOOD. You mean if I want to eat it I will catch it?

Mr. MUERET. Right; that's the way we do it with deer, isn't it?

Senator PACKWOOD. No; you can go and buy venison. I was at a restaurant the night before where venison was on the menu. You don't have to shoot it yourself.

Mr. MUERET. Well, it was either illegal or done by an Indian.

Senator PACKWOOD. I am glad you don't hold to the same theory on beef.

Mr. MUERET. No; I don't. This brings up another little point that I missed, however. I hear commercial fishermen continually referring to themselves as producers, which they are not. They are harvesters only. To be a producer they would have to be an aqua farmer. Of course when we go to shoot our own beef, that would be all right if

we feel and over the past few years we have seen a steady increase
of the number of fish taken from the Columbia River. I
I object.

Senator Packwood: I have to stop you. I have to move wit-
nesses that want to testify yet. I apologize.

Mr. Mueret: I have concluded. Thank you, sir.

Senator Packwood: We still have 10 people to go. I had promised to
complete this hearing by 12:30, so if you could limit or restrict your
comments to points that have not been covered by other witnesses I
would personally appreciate it.

Mr. William Puustinen.

**STATEMENT OF WILLIAM PUUSTINEN, CHAIRMAN, COLUMBIA
RIVER FISHERMEN'S PROTECTIVE UNION**

Mr. Puustinen. Senator Packwood, members of the committee, I
am William Puustinen, legislative and conservation chairman of the

Columbia River Fishermen's Protective Union since 1939 consecutively. This is my 57th year of active gill netting on the Columbia River, I am also a farmer in equal expenditure of my time since childhood and I am interested in the conservation of the watershed, the forest and all other natural resources so that I am continually moving back and forth in the business of my chosen work. I have lived my three score and ten and I am now 4 years old on the second stretch of life. So if I have some odd statements you can understand how they come to be.

The first thing I would like to say in a very short time is that I am going to just merely touch upon some of the points that I think perhaps your committee would be interested in. I don't want to go into a harangue on a lot of the story or the history I wish you members did know and I know, and I recognize the fact now in my later years that many of the things I know are no longer verbally to be given to you by anyone else because those people are gone—suggest one point, and it is an illustration. National Marine Fishery Director Shonan, while he was director of the Fish Commission of Oregon, was surprised because I made the statement years ago that I wish there was a system of monitoring the reaction of Columbia River salmon runs to the flow qualities and quantities and temperatures of the Columbia River water so we would have year-to-year data accumulating to give us a directive source of information as to how to manage the runs and how to select the closures and regulations affecting each segment of the run as it went up the Columbia River into the Snake, into the Oceanog, into whatever it is. We do not have this information to this day, Senator. I say that we need that.

One of the points that I spoke to Shonan about was the spring runs, as for instance in 1922 when I was fishing gill nets on the Columbia—

Senator PACKWOOD. Mr. Puustinen, I am sorry. I don't want to be rude, but I have got to ask people to abbreviate their statements now. I have got to ask the remaining 10 people to abbreviate their statements. I don't want to be rude to you, but I have got to finish this hearing by 12:30 and others are not going to get on if you go on at length.

Mr. PUUSTINEN. The point here was that if the biologists today in the local commissions and in the United States Marine Fishery Service understood what we have in the past, we are losing valuable information and I wanted to show that. Today I would like to suggest to you that we need at this late hour federally funded, federally managed programs to monitor these runs of the fish that are coming into the Columbia River for the simple reason of getting scientific information on how to manage it better than we are managing it today.

When I broached the subject to the State commissions of Oregon and Washington they give you a very logical answer, "Bill, we don't have the funds, we don't have the personnel." So there is, on an interstate river, where the States have interstate complications, it is to me seemingly a point where the Federal Government must come in and take over, as you did in pollution control when we had the pollution in the past between the polluters of the Columbia. So that is the point that we need to come in.

The point that I wanted to make was that even with the excellent qualities of biological stock all the same, we did not realize that this water, coming down in 1922 and 1923, carried flows of soil, alkali, water from the upper Columbia, including the manure and everything else from the stock fields of eastern Oregon and eastern Washington, and Idaho and the heavy spring flow took the salmon back down the Columbia clear out to the sea.

Today, Senator, we don't operate on that knowledge. It is pitiful that we have lost some of those things. I would like to suggest that if you can, you could get the Fish and Wildlife Service or the National Marine Fisheries Service of the Federal Government to make the proper researches in this field and then develop whatever program good judgment on your governmental agencies would dictate to help the State agencies and help our fishery to know how to manage the runs, how to go ahead and regulate them to the best advantage, and to save remnant seed stock in the streams, where I know then we could develop a volume fishery for all.

Senator PACKWOOD. I appreciate your bringing this up. I didn't know the information was not readily available now, or had not been done.

Mr. PUUSTINEN. It has not been documented because in my time nobody wrote it up. I didn't even write—I am guilty also of that very fault.

Another thing I would like to say is that in the economics of the fishery, let's begin to look at this fact, that the American taxpayer today is funding most of the fishery or the fishery-related work in our commercial fishery. At the Bicentennial, one of the ladies from Vermont put it very clearly to me, "Why don't I get 'wild chinook' on the American market anymore? I remember when I was a little girl, my dad bought a case of Columbia River royal chinook." I had to tell her that we didn't have any royal chinook anymore in the Columbia, we have lost them. But you are paying tax money into the Federal funds of the United States and by your funds being paid, you have a right to at least say something of the management of the Columbia River fishery resource, or any other commercial fishery.

So I would suggest that we have been getting away, out of the field of the real responsibility of all of us in the fishery to some extent. We have begun to think of individual values, individual needs, in preference to the need of the great general public. I would say that the resource should be managed first to save it in a very permanent and viable condition for the American public first, the American taxpayer, then to us as commercial fishermen, the individual workers, trollers, recreational fishermen, Indian fishery and all, in their proper section in the American economy and society. So that would be that part of the thing.

My last point—

Senator PACKWOOD. That last statement you just made is the crux of quite a bit of the controversy.

Mr. PUUSTINEN. Sure it is. We have to work at it a long time. I don't expect you to have an answer immediately. We must work. I have been working 57 years myself. I would like to work as many more as I possibly can. But one more thing than that came up here was the discussion of the communication with your colleague, Senator Mark Hatfield. I

happened to make the remark to him here a year or so ago that it seemed to me essential now with the coming of the 200-mile—were developing yet, that we should also qualify a zone at the mouth of the Columbia River or anywhere in the area at the mouth of the Columbia River, where there would be no fishing of any kind whatsoever, for this simple reason:

Biologically we know that the Columbia River is pouring into the ocean tremendous quantities of fish nutrients, fish foods and so forth. There should be that in this area of the mouth of the river protection of the young fish that can feed, the fingerlings that are coming from the estuary after they have been acclimating themselves to the brackish water and the fresh water, then they move into the ocean to feed; they feed first out in the short area around the mouth of the river. When I wrote to Hatfield about it—

Senator PACKWOOD. I am going to have to stop you. I am sorry. I apologize, but I am going to have to let these other people come on to testify, in good faith.

Mr. PUUSTINEN. Could I say this, then, Senator? Would it be in line to write some of these points up and send them to your office, as we have in communications in the past, and outline many of the things I think are very important and I have not been able to say them because, as somebody said here before, even in these 200-mile commissions there are not enough commercial fishermen speaking for the commercial fisheries.

Thank you.

Senator PACKWOOD. Thank you. Fred Markham? Carl Helberg? T. R. Wakefield?

STATEMENT OF T. R. WAKEFIELD

Mr. WAKEFIELD. I just wanted to say that there are logging companies raising fish now for their profit and that they are responsible for a lot of fish runs here on the coast, I have noticed through the years that I have fished.

Senator PACKWOOD. I didn't quite understand you.

Mr. WAKEFIELD. I have noticed through the years that I have fished that the fish—there aren't as many—are on just separate capillary streams and different streams up and down the coast. They are raising fish for themselves. But I think when they replace the trees and stuff—you know they crow about how good they replace the trees, but they don't do nothing for the salmon in the streams. Maybe they ought to be doing something about that.

Senator PACKWOOD. You are talking about Weyerhauser's fish farm.

Mr. WAKEFIELD. Yes.

Senator PACKWOOD. I am not quite sure I understand what you are driving at.

Mr. WAKEFIELD. Instead of letting the commercial and sport fishermen replace, try and uphold the whole thing they ought to help. That is all I have to say.

Senator. PACKWOOD. Thank you. Sorry to have kept you waiting for so long, R. A. Jones?

STATEMENT OF E. A. JONES

Mr. JONES: I was a little bit not getting in 700 on the 1st, heard to must sail yet. We had a sail on the 1st, and the 2nd, the 3rd, and the 4th. I think the Columbia River has been a good success. Several years ago there used to be salmon runs on the Columbia, I think they have quite taken the Columbia River and the Columbia River, streams and rivers that flow into the Pacific. That has not been a success of stocking grounds that are not something salmon is this one. I would like to ask for a Federal survey to determine whether these stocking grounds could be established. I think that the Federal Government could do this.

Senator FLETCHER: You have suggested has not been more than the last 2 years—the amount of money that has been available for this kind of work. But unfortunately the fish are not coming yet. But not an equal amount of money is available to have been suggested over the years for the Columbia River, is that correct?

Mr. JONES: I don't think there is any question that the salmon has tapered off. I think that there has been considerable efforts in the Columbia River. But I don't think all of this should be geared just toward the large rivers that there might be some smaller rivers that could use support—all the large rivers could use sort of attention some of the points of procedure by going to the smaller streams.

Senator FLETCHER: The ones that used to support excellent runs. That is not very many, is that correct?

Another thing, there are many signs of a decline.

STATEMENT OF DAVID KADLOW

Mr. Kadlow: My name is David Kadlow. I am from Washington, near Walla Walla. I am a salmon and tuna troller. I just come down because we have been having some problem with our State fisheries on the part of the council from Washington, which is somewhat like the whale that has been laying on the beach for 4 months. But I have here a document from the Washington State Fisheries which they say we are all supposed to believe in. In this article it is talking about the recreational fisheries, and we might as well help them out a little bit. It says if this issue was not in existence the money would be spent in other equal value recreational pursuits. But in relation to the national economy these fishery expenses could not be regarded in a—this is in two parts—in net economic yield since it is assumed that these recreational dollars would be put into alternative recreational uses if there were no fishery like that in existence.

So that is enough of that. That takes care of that part. We have to believe what they tell us up in Washington. We talked about conservation. I don't know if you have seen these pictures, Senator. This is what Washington State Fisheries does with conservation, destroy complete runs. We have two or three other articles about it. This happened 4 years ago. At that time the Oregon coast had a tremendous silver run. They aren't catching any silvers any more, because this was the third year before a man caught it. Every night down the road

during these seasons in the lower Columbia hatchery they were sending full pickup truckloads of round salmon to the canneries and doing away with the runs. That is what these articles are all about.

There is a fine example of the disaster, from your logging experiences. I don't know if you have been around the woods or not, but this is the way we conserve our streambeds. We totally cut timber and let the slash and everything run down into the streambed so a fish couldn't hatch if he wanted to.

I only want to take 2 minutes. I'll let you look at them for a moment. There are quite a few questions I would have liked to answer for you at the time you asked other men, but I won't. One of them like you asked what would happen if the troll industry fished year around. I think it has been documented that it would only make a 1- or 2-percent difference in the total fishing amount for the whole industry, over the whole amount of fishing there would only be a 1- or 2-percent difference.

In Washington I think the ocean recreational fishery amounts to the same amount as troll fishing—50-50 pretty close. That is all I have.

Senator PACKWOOD. Do you want me to put these in the record?

Mr. KADLOW. That is the only copy we have. These are the only ones that were saved—oh, here are some more. I will try to get through the papers and see if we have some more or if I can reprint them. Here is a good example of conservation. Of course, you know all about this. These are hatchery entrances and hatchery places and Indian gill nets fishing the hatchery mouths right where they enter into the pools. You have probably seen pictures of that.

I know Idaho wants a big percentage of their fish back. But I also just the other day in the Oregonian I see where Indian fishermen were standing there with big triple hooks on big long bamboo poles to sneak them right out of the hatchery in Idaho just before they got in to make little baby salmon. Like a man I had out with me fishing from the Washington State Fisheries Department said, "That poor little fish" when I brought him in the boat, "That poor baby."

Senator PACKWOOD. Thank you. Who is next? Come on up.

STATEMENT OF RICHARD THOMAS

Mr. THOMAS. Richard Thomas. I am a small troller. I wouldn't be here today if I didn't have starter problems. I'd be on the ocean like most of the rest of the fishermen. That is in relationship to the remark as was said before, they are an independent breed, and most of them are out on the ocean now rather than coming in here. This makes it difficult for them to get a lot of the information that I might have picked up or other people might have picked up at this hearing. I think there is a definite information gap.

Last night a friend of mine came in pretty steamed up because he had been fishing out around a foreign vessel that is off the rockpile and been picking up some net-burned silvers, which he is sure that they are gill netting at night. I don't know whether that is true or not, but it makes him very unhappy and he has no way to find an answer, see if they are doing it or if they are doing it, what controls we have and what can be done about it.

This is just one illustration. I think there should be some way that the average commercial fisherman could get more information and better information about what the Government may be doing for them and when he finds these net-cut silvers, for example, it is not very conducive to gaining confidence in his Government.

Also, if you would like to come down and see what the commercial fisherman who goes out every day has to say, why don't you drop down to the port dock and talk to some of them on a stormy day or in the evening, and if you promise to stay out of the way of the gear, maybe someone might even offer to let you go out in a boat.

Senator PACKWOOD. Come on up.

STATEMENT OF ZEKE GRADER, PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS

Mr. GRADER. Thank you, Senator, for this opportunity to speak here today. My name is Zeke Grader. I represent the Pacific Coast Federation of Fishermen's Associations. Our office is in Sausalito, Calif. Our association represents 13 marketing associations in northern and central California. Our fishermen are involved in the salmon, dungeness crab, shrimp, black cod, swordfish, and herring fisheries. I might also add that I am a member of the Salmon Advisory Panel and was past temporary chairman.

The first thing I would like to point out for the record was a statement that was made earlier here today. Our association is concerned with the effects of foreign investment in the American fishery and whether this would act to circumvent the intent of the 200-mile act, however we in no means support the position taken by New England Fish Co.—in fact, we deplore the hypocrisy of many American processors that while having foreign involvement themselves in other countries would seek to stifle it here, and particularly stifle some needed investment that could be used in the American fishing industry. I would say, however, we are concerned with the effect of foreign involvement. I wanted to make that very clear for the record so there would be no confusion.

I would have to say that we do share Chairman McKean's belief in the 200-mile act, we do believe it is a very good bill. The problem is that I believe that most commercial fishermen, at least from the California standpoint, are having problems with this act and many indeed would like to see it repealed because of actions taken by the regional council.

I think to be very brief, I would say that Bob Hudson's concerns that were expressed here earlier this morning accurately reflect the California sentiments as well.

I would also like to state a couple of things in regard to what we see as some needed and very good national standards and how we think that they have been gotten around. First of all, on the optimum yield concept, we have had it defined to us—at least it was defined to me by Congressman Leggett that optimum yield was seen by the Congress as maximum sustained yield as modified by certain socioeconomic effects. What we have seen by the plans or the regulations that have come down, however, is maximum sustained yield as modified by cer-

tain judicial decisions and that is it. As far as being fair and equitable, I might state that we do not believe that the last year's regulations were fair and equitable as called for in the Fishery Conservation and Management Act.

I might state, as a gentleman did earlier here today, that the Washington Recreational Fishery takes roughly 50 percent of the ocean-caught fish, the troll fleet takes the other half. There were no restrictions whatsoever placed upon the Washington charter boat or Washington recreational fishery, I might add. The so-called excuse for not doing this was that they took cuts in 1976 from the State. I might also add that the trollers in Washington did also and that the cuts taken by the recreational fleet in 1976 were not substantive and had virtually little effect. The cuts, however, last year in the troll fleet for 1977 were substantive.

Finally, I think the thing that we are perhaps most distressed about is that in the so-called plan—and hopefully this will be better addressed in the comprehensive plan—is that the fish really have not been looked at throughout their range. I think some of the gentlemen from the Columbia River have already expressed today, some of the sports, that when you consider salmon you have to look at them throughout their range, and that is a gravel-to-gravel approach. You just cannot create an artificial fishery in the ocean and say this is how you manage it. Most of us know in this room that the depletion of the salmon resource hasn't come from overfishing by trollers, it hasn't come from overfishing by gill netters, it hasn't come from overfishing by the recreational fishermen. It is largely as a result of the degradation of the inland spawning and rearing habitat. We are really not going to have salmon conservation until we address this.

I think that this is something that has to be made perfectly clear, that what we have right now is not a plan, it is indeed only regulations. I think there are some positive things that Congress can do, and I will try to be very brief about these. First, I would agree with John McKean that we do need additional funds both for data which is inadequate and also for additional observers. I would also think that some work is going to have to be done with the Coast Guard, particularly in regards to their boarding procedures, since they are now being asked to do much of the enforcement activities.

Finally, I think there needs to be some clarification in the Fishery Conservation and Management Act as far as the role of advisers and that goes. I share the frustration that Don Christianson expressed, that we have been asked merely to react to things and not really come up with anything positive, which I would hope would be what the advisers could do.

We have had a very good experience in California where sportsmen, commercial fishermen and processors have all sat down in the same room and virtually worked on salmon problems and come up with some very positive recommendations for the State legislature. I would hope the same thing could be done for the salmon advisory panel. But so far I think that has been thwarted when we have been told that they expect from us 23 different opinions and all we are to do is merely reflect the feelings of our constituents rather than come up with anything positive.

I am sorry I have talked a little bit fast. I realize we are short of time here.

Senator PACKWOOD. I appreciate your coming up. I realize it is not convenient for you. Who else? We have 10 more minutes.

STATEMENT OF JEFF FELDNER

Mr. FELDNER. I will try to be real quick. My name is Jeff Feldner. I run a troller out of Newport, the *Dolly*. What I want to talk about might be a little peripheral to the scope of the discussion, I hope not. If it is, let me know. It is the problem of damage to fishing gear by foreign vessels. On August 8—about 2 weeks ago—I was hit by a freighter in 35 fathoms of water. One, it was a bad experience. One of the worst things about it is that you have to come to realize that you have to pursue and prosecute under your own power. It is very difficult to do. It is expensive and the mechanism is ponderous and in most cases just about nonexistent.

Senator PACKWOOD. Was this an American boat or a foreign boat?

Mr. FELDNER. Foreign. What I want to know is somewhere within the framework of the 200-mile fisheries Conservation Act there has been set up the mechanism for recovering damage to gear. It may be stationary gear, and I think it is damage caused by foreign fishing fleets. Is there any way that we can establish within the framework of this authority some mechanism to pursue and prosecute foreign shipping, or for that matter American shipping, for damage to fishing gear?

Senator PACKWOOD. Yes.

Mr. FELDNER. This happens a lot. It has happened to many people that I know. It is not—

Senator PACKWOOD. You are walking right down my alley. This problem was corrected by an amendment I offered recently. It is in conference with the House right now. If the House will accept it it will become law. It would provide that when you are damaged by a foreign vessel you will be reimbursed immediately by the Department of Commerce and they in turn can pursue the foreign government and attempt to recover from the foreign government. But it takes the burden of recovery off the fisherman. You don't have to worry about suing them or pursuing them. If that amendment passes the problem you talked about will be solved.

Mr. FELDNER. Good. That essentially tells me what I want to know. I hope that it goes.

The other thing would be probably more directed to you as a Congressman than to the committee here at the meeting, and that would be is there anything that could be done to set up shipping lanes, coast-wide shipping lanes? The boats operate ridiculously close to shore under all conditions. No matter where you set a shipping lane you would be running into interference. There will be user groups who say they fish in that particular area. But it is common prudence and statistical data would show that the closer in they are the more people they are going to be running over.

The night that I got hit there were probably 50 boats within 4 miles. That boat could have and almost did hit several of them.

Senator PACKWOOD. The answer is yes, we do in the Gulf of Mexico now because of the drilling rigs, because of the problems that the drilling rigs caused. We will be extending it to New England. The authority is there. I think the point you raise is a very valid point.

Mr. FELDNER. Something should be done. It should be outside say of 100 fathoms, the figure could be established. But the closer in they are, the more people they are going to run over. It has just happened too much.

Senator PACKWOOD. You got hit by a freighter?

Mr. FELDNER. That's right.

Senator PACKWOOD. I am surprised you are here at all.

Mr. FELDNER. Yes. I am lucky.

Senator PACKWOOD. Good luck.

Mr. FELDNER. The main headache doesn't end when you realize you are alive. You still have to get—my season is done, it is shot. There is probably nothing that I am going to be able to do about it.

Senator PACKWOOD. Thank you for taking the time to come. I appreciate it.

Mr. FELDNER. Thank you.

Senator PACKWOOD. This last gentleman here.

STATEMENT OF JOHN BLAKEMORE

Mr. BLAKEMORE. My name is John Blakemore. I am the other half of Jeff's crew. I was on the boat, too. I just want to add, the problem, once we had been hit, realized that we weren't going to sink, and realized that we were in zero visibility fog, we could make very little headway because of damage and our steering was bad, and the radio was out—we got on the CB, we made connections, via another fishing buddy we got to the Coast Guard.

This is a problem—I have spent my life mostly as an Atlantic fisherman. I have 21½ days out there. But I speak in general of my experience with the Coast Guard. With the 200-mile limit, I am sure with all of the tanker problems last winter we all heard about the Coast Guard has to have more money, and this kind of thing. Well, a prime example of this is the Coast Guard is not equipped with lower end here. All of the fishing boats out of here work with the lower end, they work with lower end and depth finder for coordinates—"I'm in 32 fathoms and I'm at 2,310 microseconds." The only way the Coast Guard could find us was to get a private vessel to locate us through the private vessel's lower end, and then follow the private vessel to us.

Once they got to us we sat for 4 hours because the Coast Guard's radar broke—not just one radar, but all three radars went. That is because they get low bid equipment. The Navy wouldn't put up with any of this, I mean national security. But apparently their operating budget is a little bit smaller than the welfare budget for New York City.

These guys did a wonderful job. I've got no complaint against anybody in Yaquina Bay, anybody off of Point Judith, R.I., where we used to fish. It is just the question that the Coast Guard gets short shrift equipment and short shrift on man and materiel, all of that. When I said to the guy up there after we met with him at 5 in the

morning, I said, "Look, I am going to write and talk to people. What should I say? Just more money?" He said, "No. Better equipment."

I am just asking you, as somebody who nearly lost his life and then who nearly lost it again because there were more vessels in the area; they couldn't figure out where we were because the Coast Guard couldn't pin down where we were, because they didn't have any kind of an interface in equipment, that the Coast Guard be given more consideration, and hence some of us given more consideration.

Senator PACKWOOD. You and Jeff are ideal straight men for me. The other amendment that I have gotten passed recently is that two new Coast Guard cutters and 200 additional men, will be used to enforce the 200 mile zone. The authorization for it has passed and we are now fighting over the appropriation. To summarize, I think we get as much value for our money out of the Coast Guard as any other service.

Mr. BLAKEMORE. Sure. Those guys hung around and helped us with all kinds of stuff they didn't have to. And they had been out on 20 other tow-ins in the last 24 hours, breakdowns, all that kind of thing. Then at 4 in the morning they are still out there helping us get our rigging and every thing that was smashed cleared.

So no complaints there. If it is any help in all of this, I have written Senator Hatfield and talked with his office, and they are on to something through the Department of Transportation. I also wrote an old friend, John Chaffee. So he has heard about all of this. Whatever can be done in this direction would be wonderful. I am glad to hear that there is more money coming, because the guys need it. And I thank you for your time.

Senator PACKWOOD. Thank you. Glad to have you with us. Let me say again that the hearing record will remain open for at least 30 days and if there are other statements that anybody wants to put in, if they will simply mail them to my Senate office in Washington, D.C., they will be included in the record.

In compiling the hearing record for today I intend to include the recommendations for our fishery policy in three separate reports: the Eastland study; the General Accounting study; and the Office of Technology Assessment report. Following that I will make a summary statement with my recommendation to my colleagues on the Commerce, Science, and Transportation Committee.

[The reports follow:]

ATLANTIC STATES MARINE FISHERIES COMMISSION, GULF STATES MARINE FISHERIES COMMISSION, PACIFIC MARINE FISHERIES COMMISSION, A REPORT TO THE CONGRESS: EASTLAND FISHERIES SURVEY, MAY 1977

SUMMARY OF RECOMMENDATIONS

This summary lists in concise form the recommendations set forth in this report. Where appropriate, recommendations which relate to the same point or overlap have been combined.

The summary includes the recommendations of the National Conference for the Eastland Fishery Survey and recommendations of regional or national significance from the regional reports which were not specifically addressed at the National Conference. Each summarized recommendation is referenced to the full recommendation in the report. The recommendations not developed at the National Conference which are reported in the section "Additional Recommendations from

the Regional Reports" are identified by the letters "Add." preceding the number of the recommendation. The summary is divided into the following categories:

- I. Conservation, management and general supportive services:
 - (a) Institutional Arrangements.
 - (b) Development of Effective Management Programs to Conserve Stocks.
 - (c) Conservation of Habitat.
 - (d) Information and Education.
- II. Utilization and development:
 - (a) Assistance to Commercial Fisheries.
 - (b) Aquaculture.
- III. Marine recreational fisheries:
 - (a) Recognition of Marine Recreational Fisheries.
 - (b) Improved Access.
- IV. Special needs of island territories.

I. CONSERVATION, MANAGEMENT AND GENERAL SUPPORTIVE SERVICES

A. Institutional arrangements:

Recommendation No.

- | | |
|--|--------------------------------|
| 1. Consolidate all Federal fishery-related activities within a single cabinet-level department and designate a Fishery Agency within this department whose director shall report to the highest possible departmental level. | I.A.3. |
| 2. Delegate to the Fishery Agency jurisdiction over all Federal fishery conservation, management, and development programs and activities in marine and inland waters. These include full management authority under the Fishery Conservation and Management Act of 1976 (Public Law 94-265) for promulgation of Federal regulations concerning seasons, quotas, gear restrictions, and other controls over harvesting; also all other fishery-related functions presently delegated to the Federal Government by law or treaty. Delegate to the Congress authority to establish taxes, licenses, fees, permit costs, fines, and penalties on foreign fishing vessels. | I.A.3,
I.A.6, and
I.A.7. |
| 3. Assign to the department containing the Fishery Agency responsibility and authority for coordinating all Federal regulatory, enforcement, and management functions which affect the fishing industry. | I.A.5. |
| 4. In development of fishery policy, emphasize the high priority importance of use of fish for food in all fishery activities, including commercial fisheries, recreational fisheries, and aquaculture; while at the same time recognizing the recreational values of marine fisheries to the Nation. | I.A.2.
I.A.4. |
| 5. By appropriate congressional action, create an Office of Fishery Policy to assist the Congress in exercising an expanded oversight and policy development capability, and constitute a permanent advisory committee comprised of regionally balanced user representatives to serve that Office of Fishery Policy. | I.A.1. |

B. Development of effective management programs to conserve stocks:

- 1. With particular reference to the Fishery Conservation and Management Act of 1976:
 - (a) Provide for balanced membership on each of the regional fishery management councils to assure equitable representation of fishery user groups and to maintain an equal partnership between user-group interests and government.

I. CONSERVATION, MANAGEMENT AND GENERAL SUPPORTIVE SERVICES—Continued

B. Development of effective management programs to conserve stocks—Continued

1. With particular reference to the Fishery Conservation and Management Act of 1976—Continued *Recommendation No.*
- (b) Encourage regional councils to consider carefully gear and/or user conflicts which may have adverse effects on fish stocks or which cause severe social stresses among fishermen, and to develop equitable dispute settlement mechanisms which will incorporate rigorous but fair enforcement and sufficiently severe penalties to discourage violations. I.H.
- (c) Give first priority to domestic fisheries when allocating allowable catches of underutilized species. I.B.7.
- (d) In establishing allowable catches for both foreign and domestic fisheries, utilize U.S. criteria and calculations for determining optimum yield (rather than any foreign interpretation or calculation). I.B.5.
- (e) To the extent possible, promote uniformity of fishery regulations, and limit those regulations to the minimum required for sound resource management. I.B.2.
2. Concerning need for improved fishery information systems:
- (a) Establish national and/or regional data centers for acquisition and dissemination of fishery data on a timely basis for use by fishery management planning and regulatory agencies and by resource users. I.D.2.
- (b) Include in the data base developed for management purposes both the objective data which are a product of research, and the subjective information which can be provided by experienced fishermen and other resource users. I.D.1.
- (c) Maintain confidentiality of data obtained from the operation of individual fishermen by pooling or summarizing such information whenever used in published reports. I.D.3.
3. With respect to financial support:
- (a) Significantly increased Federal funding to cover the costs of improved research and management of commercial and recreational fisheries, to include additional funds for national and regional programs as well as for supplementation of grant-in-aid moneys apportioned to the States. I.F.1, III.A.2, and III.C.
- (b) In budget preparation, treat fishery grant-in-aid programs as budget elements separate from the general support budget for the Fishery Agency. I.A.2.
- (c) Obtain a major portion of the funding for fishery programs from general tax revenues of the Federal and State Governments; but at the same time augment national programs from foreign fees, licenses, and fines and local programs through licenses imposed on domestic users. I.F.2.

I. CONSERVATION, MANAGEMENT AND GENERAL SUPPORTIVE SERVICES—Continued
 B. Development of effective management programs to conserve stocks—Continued

3. With respect to financial support—Continued Recommendation No.

- (d) Assure adequate funding on an annual basis for sea lamprey control in the Great Lakes to provide conditions suitable to maintain a desirable and productive species balance. I.G.

4. Concerning continuing policy problems in fishery management, the Congress should take action on the following:

- (a) Review existing treaties with native Americans and related claims for their special rights to fishery resources toward the object of creating appropriate institutional arrangements to conserve and enhance the fishery resources, while protecting those rights reserved to native Americans. I.B.4.
- (b) Recognize that severe allocation problems of the Pacific Northwest salmon fishery have been compounded by court decisions reserving 50 percent of the harvestable salmon and steelhead to treaty Indians. Add VII.
- (c) Amend the Marine Mammal Protection Act of 1972 to allow rational management of marine mammal populations as integral segments of the marine ecosystem to make possible, where necessary, the prevention of overpopulation of these organisms with resultant deleterious effects on economically important species upon which marine mammals feed. Add IV.
- (d) Maintain international organizations and establish new ones where required to manage tuna populations effectively in the Atlantic and Pacific Oceans. Add I.A.
- (e) Assure continued access by U.S. fishermen to traditional fishing grounds in the conservation zones of other nations. Add I.B.
- (f) Recognize effort limitation as a useful management tool to help resolve allocation problems, but also recognize that users are not united in their support of limited entry, and that they stress the need for thorough evaluation of effort management techniques and potential impacts, that evaluation to include direct industry input prior to implementation. Add VII.
- (g) Recognize the increasing importance of nonconsumptive uses of aquatic resources such as observation and study, and ensure that these activities are given fair consideration in resource management decisions. Add VIII.

C. Conservation of habitat:

1. Endorse the statement in the National Plan for Marine Fisheries, with minor modification, as restated below: Reverse the downward trends in quantity and quality of fish habitats by minimizing further losses and degradation of these habitats, restoring and enhancing them where possible, and establishing protected areas where necessary. I.C.1.
Add XXI.

I. CONSERVATION, MANAGEMENT AND GENERAL SUPPORTIVE SERVICES—Continued

C. Conservation of habitat—Continued

while recognizing other compatible essential uses *Recommendation No.*
of fish habitat areas.

- (a) Improve the consideration given to fish habitats in key decisionmaking processes.
 - (b) Mitigate losses of habitat, where possible restore habitats lost or degraded, and develop economically feasible enhancement opportunities.
 - (c) Establish sanctuaries, reserves or other systems when necessary to protect critical fish habitats and maintain fish production.
 - (d) Improve the quality and increase the dissemination of information required for effective fish habitat conservation.
2. Prevent rapid development of coastal and marine areas including those of the Continental Shelf where based on hastily gathered and often critically incomplete data. I.C.2.
 3. Take stronger action to assure abatement and control of pollution that contaminates fish or adversely influences fish environment, and prevent development of new environmental degradation or fish contamination. Add X.
 4. Control fluctuations in water levels in the Great Lakes to minimize damage to fish habitat, docks, boat houses, boats and related facilities. Add XI.

D. Information and Education:

In order to improve coordination and communication among agencies, and between agencies and the public, the Federal Fishery Agency should establish a Technology Transfer Division with responsibility to gather and synthesize information; prepare bulletins, seminars, and films; disseminate informational materials to the fishing industry and the public; and be responsive to needs of the fishing industry and the consuming public. Education and extension programs presently provided by the National Marine Fisheries Service, Sea Grant Marine Advisory Services, Department of Agriculture Cooperative State Research Service, and other organizations should be encouraged and coordinated by the Federal Fishery Agency.

*I.E.2, I.E.12, and
III.D.2.*

These should include, but not be limited to the following programs and services:

1. Establish an educational program supported jointly by industry and government to prepare retailers and merchandisers to properly handle and display fish products, as first step toward increasing consumer acceptance of those products and thereby increasing domestic consumption. II.A.5.
2. Develop a parallel program of consumer education to promote increased utilization of all types of seafood and thus expand domestic markets for fish and fish products. I.E.7.f.
3. Provide informational bulletins to fishermen, processors, and retailers concerning economic analyses, marketing, harvesting and gear technology, processing, quality control, and other appropriate subjects. I.E.1, I.E.5,
I.E.7, and II.H.
4. Distribute fishery market news reports to the fishing industry at no cost. I.E.1, II.A.4.
5. Provide educational and technical services to assist commercial fishermen with management of personal finances, tax preparation, loan applications, and establishment of cooperatives. I.E.6.

I. CONSERVATION, MANAGEMENT AND GENERAL SUPPORTIVE SERVICES—Continued
 D. Information and Education—Continued *Recommendation No.*

6. Establish and maintain training programs for commercial fishermen entering the industry in such supporting fields as welding, refrigeration, navigation and hydraulics, and design these programs to meet regional needs, with full recognition that for many elements of the training required, on-the-job training is superior to institutional course work. I.E.3, II.G.
7. Provide technical assistance to Federal agencies and the States for establishment of access facilities, and provide aids to recreational fishermen such as fishing maps, methods of catch and care, and quality control of the catch. I.E.8.
8. Conduct workshops in appropriate areas designed to educate the public regarding special fishing rights of Indians. I.E.9.
9. Conduct workshops and seminars to educate the public regarding habitat preservation. I.E.10.

II. UTILIZATION AND DEVELOPMENT

A. Assistance to commercial fisheries:

1. Financial assistance:

- (a) Develop tax guidelines for vessel and plant construction, modification and modernization which provide depreciation schedules having a similar time duration as financing schedules. II.B.1.
- (b) Develop a revised handbook of procedures for consistent interpretation of tax laws and tax reporting for fish harvesting, processing, and aquaculture. II.B.2.
- (c) Change Internal Revenue Service regulations which require boat owners to withhold taxes for crew members, and consider crew members as free agents while limiting boat owner responsibility to providing names, social security numbers, mailing addresses and summary of earnings per trip for each member. Add XII.
- (d) Extend the application of the Capital Construction Fund, as embodied in the Merchant Marine Act of 1936 as amended, to include shoreside facilities directly related to harvesting, processing, marketing, and aquaculture of fish products by citizens of the United States. II.B.3.
- (e) Compile a manual describing government, Production Credit Association, and other credit sources applicable to the fishing industry and where such sources of credit can be obtained, with necessary guidance and assistance for execution of loans. II.B.4.
- (f) Institute a program to provide loans to compensate fishing operations hurt by natural resource disasters, pollution, or foreign competition and provide unemployment compensation for fishermen displaced as a result of such disasters. Add XV.
- (g) Encourage development of underutilized fisheries through legislation establishing grants or long-term, low-cost loans for pilot programs. II.B.5.

- II. UTILIZATION AND DEVELOPMENT—Continued
- A. Assistance to commercial fisheries—Continued
- Recommendation No.*
1. Financial assistance—Continued
 - (h) Support and encourage development of commercial fisheries in the overseas territories and possessions of the United States by exempting those areas from Jones Act requirements that fishing vessel hulls over 5 net tons must be of U.S. construction. II.B.6.
 - (i) Fishermen who haul their own products should be exempted from the Federal Highway Use Tax or taxed at a lower rate than other common carriers. Add XXIV.
 2. Insurance:

Convene a technical committee consisting of industry representatives, legislative analysts, academic insurance advisors and labor law specialists to analyze insurance provisions of the Jones Act and Longshoremen's and Harborworkers' Act to determine if a need exists for legislative change. II.E; add XVI and XVII.
 3. Tariffs:
 - (a) Reduce tariffs on imported nets and webbing by passing legislation similar to S. 3270, but amended to allow for a gradual reduction in the tariff rate. H.D.1.
 - (b) Determine the effect of imported fish products on domestic markets with special attention to direct and indirect subsidies of foreign industries, relative costs of production, and effects of existing tariff structures, and take necessary actions to modify tariff structures to encourage and support domestic fishery development. H.D.2.
 - (c) Establish a mechanism whereby duties could be imposed on imported fish products which depress prices for domestic products, and incorporate flexibility to allow for reduced duties during periods of domestic shortages. Add XIII.
 - (d) Terminate existing and prohibit future international aid programs funded with United States capital which encourage development of foreign fishery operations that export fish products to the United States in direct competition with domestic fisheries. II.D.3.
 4. Safety:
 - (a) Designate the Coast Guard as the responsible agency for development and implementation of maritime safety regulations and delegate fishery safety education to the Federal Fishery Agency, Sea Grant and trade associations. II.F.1.
 - (b) Restrict jurisdiction of Occupational Safety and Health Administration to shoreside operations with 10 or more employees. II.F.2.
 5. Port and harbor development:
 - (a) Develop a compendium of all Federal assistance programs which relate to public and private port and harbor facility development to include a step by step approach to funding, and distribute to interested parties as guidelines for more effective port and harbor development programs. II.C.1.

- II. UTILIZATION AND DEVELOPMENT—Continued
- A. Assistance to commercial fisheries—Continued
- | 5. Port and harbor development—Continued | <i>Recommendation No.</i> |
|---|---------------------------|
| (b) Insure that the needs of commercial and recreational fisheries are met whenever port and harbor developments, modifications or improvements are federally funded or supported. | II.C.2.
III.D.3.a. |
| 6. Commercial passenger fishing vessels:
Define the commercial passenger fishing fleet as commercial fishing vessels in order that they may receive Federal loan subsidies, loan guarantees, tax benefits, fuel allocations and other benefits, fuel allocations and other benefits which fits which the balance of the U.S.-flag commercial fishing fleet receives. | II.K. |
| 7. Navigational aids:
(a) Extend the period of transition from the Loran A navigational system to the Loran C system to 5 years from the date on which Loran C is implemented, and provide nautical charts with both Loran A and C bearings printed on the same side. | Add II.A. |
| (b) Insure that the Coast Guard receives adequate funding to allow use of modern electronic equipment, compatible with that used by the fishing industry, so that they can locate and aid distressed vessels more effectively. | Add II.B. |
| 8. Marine weather forecasting:
Increase funding of National Weather Service programs so that the frequency, accuracy and timeliness of forecasts are increased and the capability to provide long range forecasts is enhanced. | Add III. |
| 9. Fuel allocation:
(a) Provide a more flexible system of allocating fuel to fishing fleets during times of fuel scarcity to include issuance of fuel coupons to vessels which could be provided to fuel dealers in any port. | Add XXII. |
| (b) Increase allocations of fuel to the domestic fishing fleet, recognizing that the fishing industry is a basic food producer. | Add XXII. |
| 10. Foreign investment in domestic fisheries:
(a) Encourage, through tax incentives, investments of capital in American shore-based plants which process fish caught by American fishermen and limit foreign investment to shoreside facilities utilizing domestic labor and serving domestic markets wherever possible. | Add VI. |
| (b) Review and analyze carefully agreements whereby domestic fishermen sell their catch to foreign operations at sea, particularly where the foreign processors can in turn deliver their product to U.S. markets. | Add VI. |
| 11. Regulation of vessel construction:
Establish shipbuilding standards to prevent design and construction of unsafe vessels and allow federal documentation of vessels only after they pass adequate stability and loading trials. | Add V. |
| 12. Office of Sea Grant:
Encourage the Office of Sea Grant to direct its programs specifically toward solving the problems related to production of food from the sea. | Add XIX. |

II. UTILIZATION AND DEVELOPMENT—Continued

A. Assistance to commercial fisheries—Continued Recommendation No.

13. Processing:

- (a) Simplify the overlapping and conflicting regulations and attendant paperwork by authorizing the Federal Fishery Agency to coordinate all regulatory, permitting, inspection and enforcement functions which impact the seafood processing industry.

II.J.1.
- (b) Revise unrealistic regulations and guidelines established by such agencies as the Occupational Safety and Health Administration, Environmental Protection Agency, and Food and Drug Administration by making them applicable to the fishing industry and supply technical assistance and long-term, low-interest loans to reduce the detrimental economic impact of such regulations.

II.J.4: Add
XXIII.
- (c) Adopt the position that seafood processing wastes are unique in their relationship to the marine environment and recognize that return of these materials to the environment can be beneficial under properly managed conditions.

II.J.2.
- (d) Require States to determine the economic impact of their effluent treatment regulations when such States impose regulations which are more restrictive or require more expensive treatment systems than those established by the Federal Government.

II.J.2.
- (e) Authorize an expanded research effort on the part of the Food and Drug Administration to develop better bacteriological standards for shellfish growing waters and to examine the possibility of allowing shellfish harvested from closed waters to be used for thermally processed products.

I.C.1.

14. Marketing:

- (a) Establish through joint industry and government action national standards for size, grade, portion and nomenclature of domestic and imported fish products.

II.A.1.
- (b) Establish for each fishery through joint industry and government action good practices for harvesting, handling and processing fish and fish products with specified quality control and mandatory inspection, and require imports to meet these standards at the time of entry into the United States.

II.A.2.
- (c) Implement an expanded market development program encompassing promotion and advertising of domestic fish products, as well as consumer education, with joint industry/government participation and funded jointly with a matching money scheme.

II.A.3.
- (d) Formulate regional programs jointly developed by industry and government to expand domestic and export markets for fish species and products not fully utilized.

II.A.6.

- II. UTILIZATION AND DEVELOPMENT—Continued
- A. Assistance to commercial fisheries—Continued *Recommendation No.*
14. Marketing—Continued Add XXV.
- (e) Alleged price-fixing and other market restraints by the major domestic market centers should be investigated by the Department of Justice.
- B. Aquaculture: II.I.1, II.I.5.
1. Designate a Federal agency with primary responsibility for coordination of all aquaculture programs of the Federal Government, including research, development, and regulation, and instruct the agency to develop a national program for aquaculture development in the United States. II.I.2.
 2. Create a permanent advisory council to the director of the agency responsible for aquaculture, that council to be composed of representatives from industry, cooperative extension services, State agencies and universities, appointed by the Secretary of the department to which the aquaculture agency is assigned. II.I.6.
 3. Provide support to aquaculturists similar to that which farmers receive from the Department of Agriculture. II.I.3.
 4. Provide long-term, low-interest loans with amortization for aquaculture. II.I.4.
 5. Create a Federal protection and indemnity (P. & I.) insurance program to apply where no reasonable insurance is available to the aquaculture industry.
- III. MARINE RECREATIONAL FISHERIES
- A. Recognition of Marine Recreational Fisheries: III.A.1.
- Recognize through appropriate legislation that marine recreational fisheries are vitally important to the Nation, since appropriate recognition would aid in securing adequate funding for marine recreational fishery programs, and would support equitable allocation of fishery resources to recreational fishermen under the optimum yield concept. Specifically, recognize that marine recreational fisheries:
1. are personal-use fisheries and as such contribute substantially to the Nation's food supply,
 2. provide opportunity for millions of Americans to enjoy healthy outdoor recreation, and
 3. support an important industry which generates an estimated \$2.7 billion in primary economic benefits annually.
- B. Improved Access: III.D.3.a.
1. Encourage through long-term, low-interest loans the establishment of needed facilities such as launching ramps, marinas, and fish handling stations. III.D.3.b.
 2. Provide navigational and communications networks needed by recreational fishermen.
- IV. SPECIAL NEEDS OF ISLAND TERRITORIES
- A. Consolidate and coordinate Federal agency relationships with the Island Territories toward the object of enhanced conservation and development of fishery resources. Add IX.A.
- B. Consider the special characteristics and problems of the island territories, including geographic remoteness, the undeveloped and dependent nature of their economies, and the need to stimulate their economic and social sufficiency, when enacting Federal laws which impinge significantly upon fishery conservation and development in those islands. Add IX.B.

- | IV. SPECIAL NEEDS OF ISLAND TERRITORIES—Continued | Recommendation No. |
|--|--------------------|
| C. Accord high priority to procedures necessary to protect and enhance the reef and shoreline environments which provide a major share of the subsistence needs of island residents, and support plans for development of island resources only if they provide maximum protection for the nearshore and reef ecosystem and the subsistence needs of the people. | Add IX.C. |
| D. Assist the island territories to develop commercial fisheries through programs which are sequentially planned and vertically integrated to include conservation of stocks and habitats, and harvest, processing, storage and marketing of the catch. | Add IX.D. |
| E. Provide recreational benefits to island visitors and generate additional local income by encouraging growth of recreational fisheries in the island territories, and development of charter boat and other services required to serve those fisheries. | Add IX.E. |

NATIONAL CONFERENCE RECOMMENDATIONS

I. CONSERVATION AND MANAGEMENT

A. Institutional arrangements

1. Create by appropriate Congressional action an Office of Fishery Policy to assist the Congress in increasing its oversight and policy development capability. This joint House and Senate office would also act to develop and analyze fishery legislation and provide treaty oversight. Membership could be drawn from the Senate Commerce Committee, the National Ocean Policy Study, the House Merchant Marine and Fisheries Committee, and appropriate House and Senate Agriculture Committees. Professional staff of this Office of Fishery Policy could assist legislative staffs of other committees in fisheries-related "homework" and policy analysis. A permanent advisory committee of regionally balanced representatives from the industry should be constituted to serve this Congressional Office of Fisheries Policy (1).¹

2. Emphasize all domestic fishery activities, including commercial fisheries, recreational fisheries and aquaculture, as food-producing activities. The Congress should note that the responsibility for this food industry is now fragmented, with most government responsibilities housed in a scientifically oriented office (National Oceanic and Atmospheric Administration) of a business oriented Department (Department of Commerce). The Congress should recognize that the American fishing industry requires services similar to those received by other food producers. Toward that object, Congress should provide line-item budget funding for all fishery programs (2A, B, C, D; 4A, B).

3. Consolidate all Federal fishery-related activities within a single department. Designate a Fishery Agency within this Department with the responsibility for fishery management and a development whose Director shall report to the highest possible Department level. The Fishery Agency should have jurisdiction over inland as well as marine fishery functions (3).

4. To improve the quality of life of the people in the fishing community and to conserve, develop, and fully utilize our valuable fishery resources, direct the Federal Fishery Agency to take into account the following characteristics of fishery resource management and development: (4A, B).

¹The numbers in parentheses refer to documentation of recommendations listed in Section V.

(a) Recognizing the importance of food to the world population, it shall be the policy of the United States that the first priority use of fish is for food.²

(b) The definition of fishery resources should include fish, aquatic mammals, mollusks, crustaceans, algae and other aquatic life.

5. All Federal regulatory, permitting, inspection, and enforcement functions which affect the fishing industry, including management of fish stocks, harvesting, processing, marketing and research, should be coordinated by the Department containing the Fishery Agency in conjunction with state fishery agencies (5A, B).

6. The Federal Fishery Agency should have full management authority and responsibility as described in the Fishery Conservation and Management Act of 1976 (P.L. 94-265), as well as all other fishery functions and responsibilities presently delegated to the Federal Government by law or treaty.

7. The implementing legislation (P.L. 94-265) should differentiate clearly the functions and responsibilities of the Congress and the Executive. Responsibility for promulgating regulations concerning seasons, catch, gear and other controls on harvesting should be delegated to the Agency. Taxes, licenses, fees, permit costs, fines, and penalties on foreign fishing vessels should be established by Congress.

B. Resource management

1. Develop effective management programs, based on the best scientific knowledge, which will provide for optimum resource utilization and which will assure that full benefits will be obtained from interstate, national and international programs for enhancement of fishery resources and environmental protection and improvement (see also I.D.; 111.D.1.a.) (6A, B, C, D, E, F, G).

2. Promote uniformity of regulation, as well as limit regulations to a minimum for sound management (5B; 7A, B, C).

3. Create new and utilize existing Regional Fishery Management Councils with responsibility to develop management plans and regulations and ensure that these plans are implemented.

4. Consider the various Indian treaties with the intent of creating, where needed, appropriate institutional arrangements to conserve and enhance the fishery resources while protecting those rights reserved by the Indians. Congress also should consider claims for recognition of resource rights by other native American groups (e.g., the Hawaiian people); also other wards of the U.S. Government, and should offer similar arrangements to conserve and enhance the fishery resources where applicable (8A, B, C).

5. Apply the U.S. calculation of optimum yield (OY), where the OY concept is used for management of stocks fished jointly by U.S. and foreign fleets. The U.S. should not rely on or endorse a foreign interpretation of OY when establishing allowable catches for foreign and domestic fisheries (9).

6. Vest regulatory and management authority foremost in the Regional Fishery Management Councils, and establish a balanced Council membership to provide equal partnership between government and fishery resource user groups. User groups shall be required to provide effective and direct input into management and planning on a parity with governmental input (10A, B, C).

7. Domestic fisheries should receive top priority in allocation of catches of underutilized species (11A, B).

² Subsequent to the National Conference several individuals representing recreational fishery interests, including the National Coalition for Marine Conservation and the Sport Fishing Institute, have taken vigorous exception to this policy statement. They stress apparent inconsistency with the now widely supported multiple-use objectives of the optimum yield concept (as enacted into federal policy in the Fishery Conservation and Management Act of 1976 (P.L. 94-265)). They advise that many individuals and organizations must actively oppose attempts to replace the optimum yield concept with a policy mandating the first priority use to one user group. On the basis of extensive Conference discussions of related topics, the editors of this document believe the Conference participants in no way intended to repudiate or otherwise weaken the optimum yield concept; indeed separate sections of the Conference report deal forcefully with special development needs of both commercial and recreational fisheries. Proponents of the statement intended it to emphasize the primary importance of fish for food in both commercial and recreational fisheries, and thereby to stimulate a reorientation of the fisheries production component of the federal management agency toward food production goals and processes analogous to those in the Department of Agriculture. We refer the reader to Conference Recommendation I.A.2. in which Conferees explicitly stress this particular point.

C. Conservation and enhancement of fish habitats (see also III.E.)

1. Recommendation 2, to conserve and enhance fish habitats, as presented on p. 37-43 of the National Plan for Marine Fisheries³ is strongly endorsed except that item 2.3 should be restated as below.

Recommendation 2 states as follows:

"Reverse the downward trends in quality and quantity of fish habitats by minimizing further losses and degradation of these habitats, restoring and enhancing them where possible, and establishing protected areas where necessary, while recognizing other compatible essential uses of fish habitat areas."

"2.1 Improve the consideration given to fish habitats in key decision-making processes."

"2.2 Mitigate losses of habitat, where possible restore habitats lost or degraded, and develop economically feasible enhancement opportunities."

"2.3 Establish sanctuaries, reserves or other systems when necessary to protect critical fish habitats, production, and associated recreational and aesthetic values."

"2.4 Improve the quality and increase the dissemination of information required for effective fish habitat conservation."

The Conference recommends that item 2.3 be restated as follows: Establish sanctuaries, reserves, or other systems when necessary to protect critical fish habitats and maintain fish production. The integrity of the habitat should be protected (5B; 12A, B, C, D, E, F, G, H, I, J, K, L, M).

2. In consideration of this overriding emphasis on conservation and enhancement of fish habitats and stocks the Conference is opposed to rapid developments of coastal and marine areas, including those of the Continental Shelf on the basis of hastily gathered and often critically incomplete data (13).

D. Establishment of an adequate data base

Effective management requires information on the abundance, distribution, and condition of stocks, and the effects of various fishing levels and of environmental changes on stock abundance and distribution. Such information is being obtained for a number of stocks and areas at present by federal and state programs. However, the information presently available is far short of that which is needed for effective management of many fisheries (6A, B, C, D, E; 14A, B).

1. Develop a national responsibility and capability to provide a uniform and continuing data base for fishery management information. An urgent necessity exists for development of this data base by government in conjunction with the various components of the fishing industry, to include subjective data obtained from the fleet as well as objective data (15A, B, C).

2. Establish national and/or regional data centers for acquisition and dissemination of fishery data. Information deposited in data centers should be routinely updated and analyzed to develop basic information for immediate application by regulatory and planning agencies and resource users (16).

3. Maintain confidentiality of data obtained from the operation of individual fishermen. Published statistics should represent grouped or pooled data, and not expose the individual fisherman's operations.

E. Information, education, and extension services

Recognizing the need for information, education, and extension services to support and ensure the future of the fishing industry in the United States, the following services are required:

1. Provide informational bulletins to fishermen, processors, retailers, and consumers. This should include simplified market news reports furnished free to the fishing industry, as they were prior to 1975. The Department of Agriculture provides bulletins and market information without charge to farmers, and fishermen should receive equal treatment (see also 11.A.4) (4A, B; 17A, B, C, D, E, F).

2. Education and extension programs presently provided by the National Marine Fisheries Service, Sea Grant Marine Advisory Services, Department of Agriculture Cooperative State Research Service, and other organizations should be encouraged and coordinated by the federal Agency responsible to the fishing industry. Additional programs as needed shall be designed and instituted by the Agency (4B; 18A, B, C).

³ Appendix to *A Marine Fisheries Program for the Nation*, U.S. Department of Commerce, Washington, D.C., July 1976.

3. Design training programs for fishermen entering the industry to meet regional needs. In addition to on-the-job training, programs should exist at the high school and community college levels in such supporting fields as welding, refrigeration, navigation, and hydraulics (see also II.G.) (19A, B, C, D, E, F).

4. Increase consumer education to promote the expansion of markets for fish and fish products and utilization of all types of seafood (see more detailed recommendations, II.A.3.; II.A.5.) (4A, B; 20A, B, C, D, E, F, G, H, I, J, K).

5. Disseminate results of economic analyses including market research, which provides a basis for decisions throughout the fishery development process. Analyses should include evaluation of investment alternatives, establishment of fishery development priorities, and assessment of risks affecting investments made by the industry (4A, B; 21A, B, C, D, E, F).

6. Provide educational and technical services to assist fishermen with management of personal finances, record keeping, tax preparation, loan applications, and establishment of cooperatives. Also provide information concerning permits, licenses and grants. The present activities of the Sea Grant Marine Advisory Services should be encouraged and coordinated by the agency responsible for fisheries (see also II.B.1; II.B.2.) (22A, B, C).

7. Gather and disseminate information concerning (see also II.H.) :

(a) Harvesting and gear technology (23A, B, C, D, E, F, G, H).

(b) Marketing on wholesale and retail levels (4A; 17F; 20A; 22B; 24A, B, C).

(c) Processing.

(d) Production costs (22B; 25A).

(e) Quality control (26A, B, C).

(f) Preparation of seafood products for consumer use (20A; 27A, B).

(g) Other needs determined by survey and consultation of the fishing industry. The industry should share equally in the annual planning of services to meet information and extension needs (4B; 28A, B, C, D, E, F, G).

8. Provide aids and technical assistance to recreational fish resource users regarding establishment of access facilities, fishing maps, availability of species, methods of catch and care, and quality control of the catch. Understanding objectives and methods of both recreational and commercial fishermen will be promoted by effective exchange of information (see also II.C.; III.D.3.) 29A, B, C, D, E, F, G, H, I, J, K, L).

9. Conduct workshops in appropriate areas designed to educate the public regarding the fishing rights of Indians (30).

10. Conduct workshops and seminars to educate the public regarding habitat preservation (31).

11. Establish a program of continuing education to ensure that the fishing industry is informed of recent management changes and technological advances.

12. Informational and educational services of a technical nature shall be provided by a Technology Transfer Division within the federal Fishery Agency. This Technology Transfer Division will be charged to gather and synthesize information; prepare bulletins, seminars, film, and other informational aids; disseminate informational materials to potential users in the fishing industry and consuming public; and be responsive to needs of the fishing industry and consuming public. Sufficient funding should be provided to permit the delivery of these information, education, and extension services. Funds may be transferred to other agencies and organizations as necessary to accomplish this mission.

F. Funding

1. Management costs include but are not limited to the costs of operations, research, regulation, relevant environmental protection, and enforcement. A management system which will restore depleted stocks and maintain stocks at high yield levels will cost substantially more than the present management efforts, even with improved efficiency of operations. Adequate funding is essential to the success of management and thus to the ability of the federal and state governments to carry out their responsibilities for conserving and utilizing the fishery resources. Major increases in general funding will be required on the part of the Federal Government (see also III.C.) (32A, B).

2. According to A Marine Fisheries Program for the Nation, a recent estimate revealed that the commercial fishing industry's impact on the national economy is approximately \$6.5 billion, while the value of marine recreational fisheries is about \$2.7 billion. Some individuals estimate that the combined contribution of

commercial and recreational fisheries to the economy is in excess of \$20 billion. Therefore, the major portion of funding for improved management should come from general tax revenues of the federal and state governments. Local or state funds should be obtained by licenses placed on users of the resources. These funds should be dedicated for use to support the fishery management programs of the local agency. All foreign fishing fees, licenses, and fines should be used solely for support of national fishery management programs.

G. Lamprey control in the Great Lakes

Assure adequate funding on an annual basis for sea lamprey control to provide conditions suitable to maintain a desirable and productive species balance (33).

H. Gear conflicts

Fishery resource user conflicts are caused by a basic behavioral instinct—aggressive self-assertion for complete territorial and/or tribal control—rather than mutual, beneficial cooperation and compromise. Each must recognize the other has a right to exist, if solutions are to be equated (34).

1. Gear and/or user conflicts, which may have adverse effects on fish stocks and/or which may cause social stresses among fishermen, should be given particular attention by Regional Fishery Management Councils (35A, B, C, D).

2. Successful management must anticipate user conflicts and must develop equitable dispute settlement mechanisms which require rigorous but fair enforcement. Penalties must be sufficiently stiff to discourage violations. This would include the possibility of removing harvesting privileges for chronic violators.

II. UTILIZATION AND DEVELOPMENT

A. Marketing

1. Establish through joint industry and government action national standards for size, grade, portion, and nomenclature of domestic and imported fishery products (26C; 36A, B, C, D, E, F, G, H).

2. Establish for each fishery through joint industry and government action good practices for harvesting, handling and processing fish and fish products with specified quality control and with mandatory inspection. All imports must meet these standards at the time of entry into the United States (26C; 37A, B, C).

3. Implement an expanded market development program encompassing promotion and advertising of domestic fish products, as well as consumer education, with joint industry/government participation and, if possible, funded jointly with a matching money scheme. Successful promotional programs utilized for other commodities such as dairy, poultry, and beef should be evaluated and perhaps adopted for domestic and export seafood markets (see also II.A.5.) (4A, B; 20A, B, C, D, E, F, G, H, I, J, K; 38).

4. Provide fishery market news reports to industry at no cost. Appropriate marketing and technical assistance should be provided for active commercial fisheries development. The Office of Management and Budget should reappraise guidelines that limit the above programs (4A, B; 17A, B, C, D; E, F).

5. Establish an educational program supported jointly by industry and government to teach retailers and merchandisers how to handle and display fish products. Retailers should be made aware of the proper methods to keep fish products at highest quality and should be taught imaginative marketing and display techniques. Such programs, if effective, would be very instrumental in increasing the demand for fish products. A need exists for applying such programs to large supermarkets where fish products historically have been poorly handled and displayed (20; 24C; 39A, B, C, D).

6. Formulate specific regional industry and government (jointly-developed) programs to develop domestic and export markets for fish species and products currently not fully utilized (11B; 38; 40A, B, C, D, E, F, G, H).

B. Financial assistance

1. The Internal Revenue Service jointly with industry and the federal Fishery Agency should modify or develop tax guidelines for vessel and plant construction, modification and modernization for the respective fisheries and provide depreciation schedules having a similar time duration as financing schedules (22A; 41A, B).

2. The Internal Revenue Service, with assistance from the federal Fishery Agency and the fishing industry, should develop a revised handbook of procedures

for consistent interpretation of tax laws and tax reporting for fish harvesting, processing, and aquaculture.

3. The Congress should extend the application of the Capital Construction Fund as embodied in the Merchant Marine Act of 1936, as amended, to include shoreline facilities directly related to harvesting, processing and marketing, including aquaculture, of fish products by citizens of the United States, as defined in the Act (42A, B, C).

4. The federal Fishery Agency should compile a manual describing government, Production Credit Association, and like credit sources that are applicable to the fishing industry. The manual should describe where such sources of credit can be obtained and should include necessary guidance and assistance for execution of loans (28A, E; 43A, B, C).

5. Underutilized fishery development should be encouraged through legislation establishing grants or long-term, low-cost loans for fishery development pilot programs (11B; 44A, B, C, D).

6. Development of commercial fisheries in the overseas territories and possessions of the United States should be supported and encouraged by exempting those areas from Jones Act requirements that fishing vessel hulls over five net tons must be of U.S. construction (45).

7. Fishermen emphasize that they do not want subsidies, merely an opportunity to compete in an equitable fashion.

C. Port and harbor development

1. A major constraint to the utilization and development of the resources within our Great Lakes, 200-mile economic zone, overseas trust territories, and commonwealths is the serious lack of adequate harbor and port facilities for both recreational and commercial fisheries. Inlet and channel maintenance is another major area of concern. The competition for waterfront property and dockage space is especially serious with offshore oil and gas development moving into many new areas. It is imperative that a compendium of all federal assistance programs which relate to public and private port and harbor facility development be assembled. The federal Fishery Agency or the Office of Coastal Zone Management should prepare this for distribution to those interested in public or private harbor development projects. An appendix to this document should include a step by step approach to funding, complete with abstracted procedures, forms, and information center addresses. This document should be made available also through the National Technical Information Service (see also Ill.D.3.; 28A; 29B; 46A, B, C, D, E, F, G, H).

2. Government should require that docking, unloading, handling and processing space needs of commercial and recreational fisheries are met whenever any port and harbor developments, modifications or improvements are federally funded or supported.

D. Tariffs

1. Reduce tariffs on imported nets and webbing by passing legislation similar to S. 3270 (Packwood bill), but amended to allow for a gradual reduction in the tariff rate. Tariffs should be reduced by 20% at 4-month intervals for a period of 16 months to allow for a reduction of high priced inventories already in domestic supplier hands and to allow for competitive production by U.S. manufacturers. Overall tariffs should be reduced by 80% and the 25% ad valorem tax should be eliminated. Domestic netting manufacturers would suffer little with such a reduction (47A, B, C, D).

2. Investigate the effect of imported fish products on the various domestic markets with special attention to:

- (a) Subsidies within foreign industries, both direct and indirect.
- (b) Relative costs of production.
- (c) Effect, negative and positive, of existing tariff structures (48A, B, C).

Results of investigations should be forwarded to all affected parties and a program of remedial action should be developed and implemented as soon as feasible to permit the domestic industry to compete on an equitable basis in the domestic market (28C; 49A, B, C).

3. Initiate an investigation, for the period 1968 to 1976, of international aid programs impacting fisheries that have been funded partly or wholly with U.S. capital through the international banking system (such as the Export-Import bank, Overseas Private Investment Corp., etc.). Other financial systems and instruments whose effect has been to develop, promote or maintain foreign fishery

operations that result in aiding entry of foreign fish products into the U.S. market also should be investigated. Congress should ensure that a specific government agency or official be responsible for continuous monitoring of these programs in the future, and should advise the domestic fishing industry of any grant or loan application that might detrimentally affect any segment of the U.S. industry. If such is the case, funding should be curtailed (49C; 50A).

E. Insurance

Convene a technical committee consisting of industry representatives, legislative analysts, academic insurance advisors, and labor law specialists to analyze insurance provisions of the Jones Act and Longshoremen's and Harborworkers' Act to determine if a need exists for legislative change. Because no ceilings are set on liability, private insurance carriers refuse to write adequate coverage. Consequently, many segments of the industry are in violation of federal law (45; 51A, B, C, D, E, F, G, H).

F. Safety

Safety aboard fishing vessels is not as serious a problem as is often thought. The accident rate in most fisheries is very low. Safety is primarily a function of equipment condition, working conditions, and operator awareness and knowledge.

1. It is recommended strongly that safety requirements be developed by industry and the Coast Guard, and implemented by the Coast Guard, not the Occupational Safety and Health Administration. Safety education relevant to fisheries should be an educational service of the federal Fishery Agency, Sea Grant, and trade associations. Maritime safety legislation may be required to put fishery safety jurisdiction under the Coast Guard (28B; 52A, B, C, D, E, F).

2. Occupational Safety and Health Administration regulations regarding shoreside operations should not apply to those with less than 10 employees (51A; 53).

G. Education and training

Many federal dollars have been spent in training fishermen by some institutions, whereas the number of graduates remaining in the fisheries after receiving such education is in many cases extremely small. On-the-job training of fishermen is not only adequate, but superior to institutional training in many cases and should be supported. However, certain governmentally-funded training and educational activities have been helpful to the fishing industry. Fishermen note the success of topic-specific workshops conducted by Sea Grant institutions for working fishermen and urge continuation of such programs. Federal funding should be continued for the development of curricula in high schools, vocational schools and community colleges in such fields as marine welding, marine refrigeration, navigation, marine hydraulics and business management (19A, B, C, D, E, F.)

H. Technology

It is generally believed that levels of technology used by harvesters, packers, processors and transporters of seafood are behind that of other segments of the domestic and foreign food-producing industries. Government sponsored R&D should be made more cost effective and should be developed jointly with industry. Information services and economic analyses are useful, but are inadequately funded through Sea Grant and the National Marine Fisheries Service and often are untimely or impractical. It is recommended that Congress direct the appropriate agencies to:

1. Make a joint compilation of existing or adaptable technologies, and
2. Expand the dissemination of current and future information (4B; 17D; 23B, C, D, E, F, G, H; 28B, C; 54A, B, C, D).

I. Aquaculture (marine and fresh water)

1. Designate a federal Agency with primary responsibility for coordination of all aquaculture programs of the federal government, including research, development, and regulation (4A, B; 5A, B; 55).

2. Create a permanent Advisory Council to provide input to the Director of the aquaculture Agency. This Advisory Council should be composed of representatives from private industry, cooperative extension services, state agencies, and universities. Members of the Advisory Council should be appointed by the Secretary of the Department to which the aquaculture Agency is assigned.

3. Provide long-term, low-interest loans with amortization flexibility for aquaculture (43B).

4. Create a federal protection and indemnity (P&I) insurance program to apply where no reasonable insurance is available to the aquaculture industry.

5. The Congress should establish departmental aquaculture objectives: for the Department in which the aquaculture Agency is housed.

6. The Agency receiving major responsibility for aquaculture programs should provide the same sort of support for aquaculture that farmers receive from the Department of Agriculture (4A, B; 56A, B, C, D, E).

J. Processing

Recognizing the importance of a viable seafood processing industry to the success of fisheries development in the United States, the following legislative actions are needed:

1. Simplify the overlapping and conflicting regulations and attendant paperwork by authorizing the Federal Fishery Agency to coordinate all regulatory, permitting, inspection and enforcement functions which impact the seafood processing industry.

2. Adopt the definitive position that seafood processing wastes (solid and liquid) are unique in their relationship to the marine environment, and return of these materials to the marine environment can be beneficial under properly managed conditions. A conflict exists between the Marine Protection, Research and Sanctuaries Act of 1972 (P.L. 92-532) and the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) regarding the dumping of fish wastes, the latter resulting in needlessly stringent application of water quality standards to seafood processors in some coastal areas. The determination of permit conditions and evaluation of discharge or dumping plans for processing wastes should be coordinated by the Atlantic States, Gulf States, and Pacific Marine Fisheries Commissions together with the Federal Fishery Agency and the respective responsible state agencies (5B; 12M; 57 A, B).

3. If a state determines that a degree of treatment of processing wastes is needed to meet water quality standards that is more technically difficult and/or more expensive than the effluent limitation guidelines established by the federal government, the state shall be required to determine the economic impact of its treatment regulations on the industry, as has been required of the Environmental Protection Agency under P.L. 92-500. This economic impact report should include the impact of possible plant closures on plant owners, processing employees, fishermen, and their community.

4. Revise existing regulations and guidelines established by such agencies as Occupational Safety and Health Administration, Environmental Protection Agency and Food and Drug Administration to make them applicable to the fishing industry. Generally, the industry is composed of small entities which find it financially and technologically difficult to comply with such regulations. The agency responsible for fishery management should supply technical assistance and low-cost, long-range loans to reduce the detrimental economic impact of administrative regulations (5B; 52E; 58A, B, C).

K. Commercial designation of commercial passenger fishing vessels

The commercial passenger fishing fleet should be defined as commercial fishing vessels in order that they may receive federal loan subsidies, loan guarantees, tax benefits, fuel allocations, and other benefits which the balance of the U.S. flag commercial fishing fleet receives (2B).

III. MARINE RECREATIONAL FISHERIES

The two most important activities ensuring conservation of marine fisheries, sport or commercial, are maintenance, restoration and enhancement of fish stock on the one hand, and protection of habitats on the other. This conclusion recognizes that both vocations and avocations depend ultimately upon a healthy resource.

There is a need to improve and enhance marine recreational fishing opportunities. Further, greater recognition of the importance of marine recreational fisheries in terms of Regional Fishery Management Council activities, federal and state fishery programs, and allocation of fishery resources is needed.

A. Recognition of marine recreational fisheries

1. The Congress should recognize, through appropriate legislation, that marine recreational fisheries are vitally important to the nation, contributing billions of pounds of fish to the nation's food supply, providing opportunity for more than

30 million people to enjoy healthy outdoor recreation, supporting an industry capitalized at 100's of millions of dollars, and generating about \$2.7 billion in primary economic benefits annually. Past actions by the Executive Branch have downgraded or ignored marine recreational fisheries in development of fishery programs. Congressional recognition would aid in securing adequate funding for marine recreational fishery programs; would support equitable allocation of fishery resources to recreational fishermen under the optimum yield concept; and would give emphasis to the need for increased attention to recreational fisheries matters in federal fishery programs (29I; 59A, B, C, D).

2. Further, the Migratory Marine Game Fish Study Act should be amended to eliminate the ceiling on appropriation of funds for research on marine game fish. Appropriations should be made on the basis of need as justified by the Executive Branch.

B. Regional fishery management councils and marine recreational fisheries

The representation of marine recreational fishery interests (anglers, assorted owners or managers of the support facilities, and the tackle industry) on some Regional Fishery Management Councils is low in proportion to other interests. The selection process should assure equitable representation of marine recreational fishery interests on all Regional Fishery Management Councils.

C. Need for increased funding

Federal funding for marine recreational fishery programs is inadequate, and state funds are actually shrinking. In the face of increased needs of the fishing public and other resource users and demands on the resource, current programs are inadequate. Not only are additional federal funds essential for national and regional programs, but additionally, supplemental funding of state programs through increases in Dingell-Johnson Sport Fish Restoration Act appropriations should be authorized. Specifically, the income should be expanded by additions in items in the excise tax base and by amending the Act to direct that apportionment be based on the number of anglers as determined by qualified surveys in those states where a saltwater license is not required, rather than on the number of license holders alone. Those states having a state saltwater license should be allowed a premium of at least 2 to 1 over states electing to utilize a survey (29C, I, L; 59A, B, C, D; 60A, B).

D. Needs of marine recreational fisheries

1. Restore, maintain, enhance, and assess fish stocks.

(a) Expand research to provide a common basis of knowledge and understanding of the biological, economic, and social aspects of marine recreational fisheries, with work in the following areas: stock assessment, including natural and fishing mortality, growth, and characteristics and value of the industry.

(b) Stock assessment and collection of data on recreational fish catch are prerequisite to any rational fishery management program. Yet federal programs and coordination of these activities, particularly regarding recreational fisheries are seriously inadequate. It is imperative that these programs be given top priority and developed cooperatively by the states and the federal government. Effective management is not possible without an adequate stock assessment and catch data collecting program (15B; 59B, C; 61A, B, C, D).

2. Improve coordination and communication among agencies, and between agencies and the public (62A, B, C).

3. Improve public access to the fisheries by:

(a) Aiding through long-term, low-interest loans the establishment of needed facilities such as launching ramps, marinas, and fish handling stations (where sport fishermen may process their catch, to include cleaning, garbage, and icing facilities) (28A; 29J, K; 46A, B, C, D, E, F, G, H; 63A, B).

(b) Providing navigational and communications networks needed by recreational fishermen (64A, B, C, D).

E. Restoration, maintenance, enhancement and assessment of fish habitat

All fishery resources are dependent upon a viable, healthy, environment. It is essential that steps be taken to reverse the downward trends in quantity and quality of fish habitats by eliminating the losses and degradation of these habitats or restoring and enhancing them where feasible. Efforts should include restoration of water quality as called for under the Clean Water Act as amended, con-

trol of dredge and fill activity in the marine and estuarine areas, restriction of ocean dumping in environmentally sensitive areas and control of practice military bombardment. Further, there is a distinct need for the implementation of state and federal laws for the establishment of marine sanctuaries (5B; 12A, B, C, D, E, F, G, H, I, J, K, L, M).

ADDITIONAL RECOMMENDATIONS FROM THE REGIONAL REPORTS

During the four days of the National Conference, the three panels addressed most of the issues of national importance. A few significant issues, however, were either not considered or not fully covered at the National Conference due to time constraints. Also, the regional reports identified certain critical areas on a regional basis, some of which were of concern to more than one region, which were not dealt with at the National Conference. To assure completeness of this report to the Congress, the editors of the regional summaries have developed the following list of additional recommendations from such issues in the regional reports, which were not specifically included in the recommendations of the National Conference.

I. DISTANT-WATER TUNA FISHERIES

A. Congress should recognize the importance of establishing or maintaining international organizations to manage tuna populations effectively in the Atlantic and Pacific Oceans. Because tunas are highly migratory species which are transboundary in distribution and harvested by many countries, and because tunas specifically are excluded from U.S. management authority, effective mechanisms for management at the international level are required to conserve the stocks. The jurisdiction of these organizations should be expanded to encompass the entire range of the species in question, or new organizations should be created which would have management jurisdiction over these additional areas (65).

B. Congress should assist the Department of State and the U.S. tuna industry in negotiating policies with foreign nations to permit U.S. access to traditional tuna fishing areas. Passage of the Fishery Conservation and Management Act of 1976 (Public Law 94-265) may affect adversely the ability of our tuna fishermen to obtain access by endorsing similar extensions of jurisdiction by countries adjacent to tuna fishing areas. Such actions become especially restrictive if the countries in question do not recognize the right of traditional fishing nations to continue fishing in these areas (66).

II. NAVIGATIONAL AIDS

A. The period of transition from the LORAN A navigational system to the LORAN C system should be extended to five years from the date on which LORAN C is instigated. Also, nautical charts should be provided with both LORAN A and C bearings printed on the same side. Fishermen are concerned that a rapid phase-out of traditional navigational equipment, accompanied by the necessity to purchase new equipment, will be unduly burdensome financially as well as technically. Sufficient time is needed to allow them to adjust to the new system (67A, B, C, D).

B. Congress should ensure that the Coast Guard receives adequate funding to allow use of modern electronic equipment, compatible with that used by the fishing industry, so that they can detect and locate distressed vessels effectively (68A, B, C).

III. MARINE WEATHER FORECASTING

Congress should ensure adequate funding to improve National Weather Service programs. Because marine weather forecasting is so important to recreational and commercial fishermen and other mariners, it is vital that the frequency of forecasts is increased and that their accuracy and timeliness are improved. Additionally, the capability to provide long-range forecasts should be enhanced. The use of more offshore buoys as well as greater utilization of vessels at sea for monitoring and reporting purposes are recommended (69A, B, C, D).

IV. MANAGEMENT OF MARINE MAMMALS

Congress should amend the Marine Mammal Protection Act of 1972 to allow rational management of marine mammal population. The provisions of the Act prevent man-caused mortality and in some cases encourage overpopulation of *le*, sea lions and sea otters with resultant deleterious local effects on prey

species. Some of these are important commercial and recreational fish and shellfish species (70A, B, C).

V. REGULATION OF VESSEL CONSTRUCTION

Shipbuilding standards should be established, to prevent design and construction of unsafe vessels. In the past, tests of new or reconstructed vessels under a variety of load and weather conditions have been inadequate or nonexistent. Federal documentation of vessels should be warranted only after they pass adequate stability and loading trials (71A, B).

VI. FOREIGN INVESTMENT IN DOMESTIC FISHERIES

Congress should encourage, through tax incentives, investments of capital in American shore-based plants which process fish caught by American fishermen. Foreign investment should be limited to shoreside facilities utilizing domestic labor and serving domestic markets wherever possible. Further, agreements whereby domestic fishermen sell their catch to foreign operations at sea, who in turn deliver their product to U.S. markets, should be carefully reviewed and analyzed (72A, B, C).

VII. RESOURCE ALLOCATION INCLUDING EFFORT LIMITATION

Congress should be acutely aware that allocation of fishery resources, particularly salmon, is of utmost concern to the fishing industry. Northwest court decisions reserving fifty percent of the harvestable salmon and steelhead to treaty Indians has compounded allocation decisions. Effort limitation is one alternative management tool to help resolve allocation problems, but participants were not united in their support of limited entry and stressed that application of effort management techniques should be studied thoroughly and evaluated with direct input from the fishing industry prior to implementation. It was agreed generally that any consideration of effort limitation should be on a fishery by fishery basis, with recognition that effort management in one fishery may have substantial impact on another (73A, B, C, D, E).

VIII. NON-EXTRACTIVE USES OF THE RESOURCES

Congress should recognize the increasing importance of non-consumptive uses of aquatic resources such as observation and study, and ensure that this activity is given fair consideration in resource management decisions (74A, B).

IX. POLICY RECOMMENDATIONS CONCERNING U.S. ISLAND TERRITORIES

(Note: Certain of these recommendations were included in the National Conference deliberations and final report. However, since the total array of recommendations have special significance for U.S. relations to these Island Territories, this section offers a comprehensive summary (cf. Pacific: 132-157 for full report).

A. U.S. Government impact on island territories

The United States should consolidate and coordinate federal agency functions toward the object of enhanced conservation and development of fishery resources (75).

B. Impact of Federal laws on island fisheries development

Federal laws which impinge significantly upon fisheries conservation and development in the U.S. Island Territories should take into account their special characteristics and problems, including geographic remoteness from the U.S. mainland, the generally undeveloped and dependent nature of their economies, and the need to stimulate in every way possible their economic and social self-sufficiency. To that end, applicable federal legislation should actively consider special provisions to assist conservation and development of island fishery resources (76).

C. Conservation of island reef and shoreline resources

Federal support for fishery conservation and development in the Pacific islands should accord high priority to procedures necessary to protect and enhance the reefs and shoreline environments which provide a major share of the subsistence needs of island residents; further, any plans for development of island

should receive support only if they take into full account and provide maximum protection for the nearshore and reef ecosystem and the subsistence needs of the people (77).

D. Development of commercial fisheries

It should be the policy of the United States to assist the Island Territories to develop commercial fisheries through programs which are sequentially planned and vertically integrated to include conservation of stocks and habitats, and harvest, processing, storage, and marketing of the catch. Program development shall take into full account the special characteristics of the living resources to be utilized and the social and economic considerations which will condition local participation of the fishery. Toward a primary goal of increased economic self-sufficiency for the Territories, the United States should provide scientific, technical, and economic advice, and also direct assistance to improve the harvesting, processing, storage and transportation infrastructure requisite to successful commercial fisheries operations (78).

E. Development of recreational fisheries

In the interest of generating additional local income from fishery resources, and to provide recreational benefits to visitors to the Island Territories, it should be the policy of the United States to encourage growth of recreational fisheries in those Territories, and development of charter boat and other services required to serve those fisheries (80).

X. ABATEMENT AND CONTROL OF POLLUTION

Stronger action should be taken to assure compliance with abatement and control of pollution that contaminates fish or that has an adverse influence on fish habitat, including the prevention of the development of new environmental degradation or fish contamination (81).

XI. REGULATION OF WATER LEVELS IN THE GREAT LAKES

Fluctuations in water levels in the Great Lakes should be controlled to minimize damage to fish habitat, docks, boat houses, boats and related facilities (81).

XII. WITHHOLDING TAXES

The IRS regulation which requires boatowners to withhold taxes for crew members should be changed. The crew members should be considered as free agents and the boatowners' responsibility should be limited to providing IRS with names, social security numbers, and mailing addresses of crew members for each trip and an annual summary of revenue earned per trip (82).

XIII. DUTIES ON FOREIGN FISHERY PRODUCTS

Congress should provide the mechanism by which duties could be imposed on foreign fishery products which drastically depress domestic prices for domestic landings and production of these products. Such a system should be flexible and allow for reduced duties during periods of domestic shortages (83).

XIV. BOAT MORTGAGES

Congress should enact legislation which would guarantee boat mortgages over a period consistent with the expected life of the fishing vessel similar to the FHA loan program (84).

XV. DISASTER LOANS

A federal program for disaster loans should be instituted similar to those provided for agriculture. Such a program should be initiated after federal review of a request by the states or industry which is hurt by natural resource disasters, pollution, or economic conditions caused by foreign competition at the marketplace. Provisions for unemployment compensation should be provided for fishermen unemployed as a result of natural disasters and pollution (85).

XVI. INSURANCE

The Jones Act should be amended to allow liability coverage only for crew members when actually aboard or unloading a vessel. Boat owners, their associa-

tions and insurance companies should have the option to file countersuits against plaintiffs and their lawyers for claims which were unproven or fabricated (86A,B).

XVII. PUBLIC HEALTH BENEFITS FOR FISHERMEN

The public health benefits extended to crews of registered vessels are discriminatory. Such benefits should be extended to crews of all vessels which operate and are licensed as commercial fishing vessels (87).

XVIII. ILLEGAL SALES OF FISH CATCH

Congress should act to amend the maritime laws to prohibit the sale of a fisheries cargo without written permission or other legal authorization by the vessel owner. The purchaser of such products and the vessel's captain and crew should be subject to stiff civil penalties for such illegal transactions (88).

XIX. SEA GRANT PROGRAM

The major emphasis of the Sea Grant Program should be directed toward solving the problems related to production of food from the sea. Purportedly, the Sea Grant Program was patterned after the Land Grant Program which initially directed its programs toward research and development to produce food from agricultural lands. The Sea Grant Program at its inception is attempting to provide research and development in eighty-two various fields of coastal activities. The Sea Grant Program would serve that national interest better by directing a major portion of its program to production of food from the sea and those areas of activities related to this production. The expertise housed in the university systems is needed to solve many of the problems facing the commercial and recreational fishing industries. If, for instance, the expertise of the food technologists of the universities was used to solve the new product development problems faced by the seafood industry, rapid progress would be achieved in this area (89).

XX. EFFLUENT DISCHARGES

Rather than developing "blanket" classifications for regulating effluent discharges, EPA should examine the effluent discharge on a case by case basis and evaluate them singularly and accumulatively as to their effects on the ecosystem (90).

XXI. NAVIGATION AND OBSTRUCTIONS

The Corps of Engineers and states should be required to cease allowing open-water spoil disposal in areas utilized by trawl fisheries if the operation will materially alter the bottom configuration.

The Corps of Engineers should be directed to permanently mark or buoy or else remove all wrecks which interfere with trawling or fishing operations. The cost of permanently marking should be contrasted against the cost of removal. Those which may be permanently marked should remain as fishing reefs for recreational fishing.

In areas where trawls and other similar nets are fished, the U.S. Coast Guard buoing requirements for state or private fishing reefs should require lighted, permanent buoys. The Corps of Engineers which grants permits for the reefs should require these restrictions in their permits. In areas where trawling does not occur or is extremely rare, the buoing requirements should be minimal or eliminated so long as the reef does not constitute a threat to surface vessels.

Since the Corps of Engineers permits offshore oil and gas platforms, their permit should contain restrictions on dumping debris (pipes, steel, etc.) from these platforms and they should supervise removal of the platforms and associated debris. They should also control the practice of connecting platforms with catwalks so that these catwalks do not materially restrict navigation (91).

XXII. FUEL ALLOCATIONS

Should fuel allocations be reinstated, the Federal Government should provide more flexible controls for the fishing fleets. Boats should be issued allocation coupons which could be provided to fuel dealers at any port. The dealers could then submit the coupons to attain their allocation. Since fisheries is a basic food producer, special increased allocations should be allowed for our domestic fleet (92).

XXIII. SAFETY

OSHA rules and regulations should be revised to accommodate each separate class of industry shop. In formulating these rules OSHA officials should use advisory panels from that particular industry. For example, advisers from the menhaden industry should help draft the regulations necessary to insure employee safety and health within their particular type of operations. An operations manual for each class of industry shop should be prepared rather than issuing the present voluminous and often ridiculous set of regulations which attempt to apply to all industries and types of operations (93).

XXIV. HIGHWAY USE TAXES

Fishermen who haul their own products to market should be exempt from the Federal Highway Use Tax, or should be taxed at a lower rate than other common carriers, since the irregular and seasonal nature of fish production restricts their full-time use of the highways (94).

XXV. MARKET RESTRICTIONS

Alleged price-fixing and other market restraints by the major domestic market centers should be investigated by the Department of Justice (95).

GENERAL ACCOUNTING OFFICE, THE U.S. FISHING INDUSTRY—PRESENT CONDITION AND FUTURE OF MARINE FISHERIES, DECEMBER, 23, 1976

DIGEST

This report deals with U.S. commercial fishing in the oceans—95 percent of all U.S. fish landings—and problems of the industry.

On November 19, 1975, the Chairmen and Ranking Minority Members of the House Committee on Merchant Marine and Fisheries and the Subcommittee on Fisheries and Wildlife Conservation and the Environment asked GAO to make a study to see what could be done to revitalize the U.S. commercial fishing industry exclusive of aquaculture (fish farming). (See app. I.)

The House Committee on Merchant Marine and Fisheries plans to use this report in formulating legislation for the development and use of fish and shellfish resources and a national fisheries policy. Where applicable, GAO proposes solutions to problems which must be resolved to revitalize this industry.

At the direction of the Chairman, House Subcommittee on Fisheries and Wildlife Conservation and the Environment, GAO did not obtain formal comments from the agencies having fishery-related programs. However, it did discuss these matters with the National Marine Fisheries Service, Department of Commerce.

Because the Office of Technology Assessment was making a study on the—
technology of U.S. fish harvesting techniques, gear and vessels, and processing fish onboard vessels and in onshore facilities, and
enforcement of U.S. fishing rights under the new 200-mile economic zone off this country's coasts,

GAO reviewed these matters on a limited basis.

A separate GAO report will be issued on Great Lakes fishing.

FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976

This act (Public Law 94-265) provides a framework and opportunities as of March 1, 1977, to assist the U.S. fishing industry by providing for—

- conserving and managing fish resources,
- supporting and encouraging the implementation and enforcement of international fishing agreements,
- promoting domestic and recreational fishing under sound conservation principles,
- preparing and implementing fishing management plans,
- establishing regional fishery management councils,
- encouraging the development of fisheries not sufficiently developed or not developed at all, and
- establishing procedures to permit fishing by other nations in the U.S. 200-mile economic zone.

The act makes many changes—steps in the right direction—but their effectiveness will depend on how they are carried out.

Because it will not be effective until March 1, GAO cannot access the impact of the act. GAO suggests solutions to problems which will (1) strengthen the Federal role in assisting the industry now and (2) remain even after the act takes effect.

FEDERAL INVOLVEMENT IN MARINE FISHING

Twelve Federal departments and agencies conduct or support fishery-related programs. In 1973, 8 of them supported 1,449 marine research projects on living systems (other than human beings). Twenty States, several regional commissions, and a number of private institutions, including universities, also supported research in this area.

GAO could not determine the extent of funds devoted to fisheries research because information was not available on the total funds from all sources. The National Marine Fisheries Service, the agency principally concerned with marine fishing, obligated \$44.5 million for fiscal year 1976.

CHARACTERISTICS OF THE INDUSTRY

Numerous individual, usually small, industries, such as the lobster, salmon, shrimp, and tuna fisheries, comprise the U.S. commercial fishing industry. Methods of harvesting, processing, and distribution are different for each.

Fish are common property. Anyone desiring to fish can do so. This contrasts with most other natural resources, in which access is limited. Fishing is more of a hunting than a cultivating activity, a high risk, and sometimes, a dangerous operation which is seasonal in nature.

Fish are a renewable but limited resource affected by natural or man-induced environmental changes, including too much fishing in specific areas.

THE ISSUES

The United States has almost one-fifth of the world's marine fish resources within 200-miles of its coastlines. It might be expected that, with such an abundance of resources, the U.S. fishing industry would be strong and prosperous. This is not so.

In addition to expanding aquaculture (not included in this study) the industry can be strengthened by—

- restoring fish stocks through effective management and improvement of the environment,
- developing underutilized species, and
- displacing foreign fishing off the U.S. coasts.

In 1974 fishermen from other countries caught 6.2 billion pounds of fish within 200 miles of the U.S. coasts. With the 200-mile wide jurisdiction provided by Public Law 94-265, U.S. fishermen will have a preferential right to fish in this area previously fished by ships of other nations.

Because certain species are overfished, restricting the U.S. harvest for these species may be necessary now and could require a moratorium until the stocks are restored naturally to a level that will assure perpetuation.

In addition, some fisheries can be strengthened by increasing the efficiency of their harvesting operations and by overcoming barriers in processing, marketing, and distributing fish and fish products.

What are the issues?

Common property

Often too many fishermen, vessels, and gear concentrate in "harvesting" a particular species which may result in overfishing. When this happens, harvesting costs of fishermen increase and their efficiency decreases. More fishermen often means less catch for each.

To conserve fish resources, States have enacted regulations which generally give little consideration to fishermen's economic efficiency. As the economic viability of fishermen becomes impaired, obtaining financing at reasonable rates of interest and with reasonable loan payback periods becomes more difficult for them.

Solution

The solution is to limit fishing, facilitating management effort while increasing the efficiency of fishermen, improving the expect

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on investments, and encouraging the development of underused species. This might be done by—

- limiting the number of fishing licenses to be issued,
- establishing fees based on volume or value of fish landed,
- establishing quotas on the volume of fish landed,
- establishing a program to buy back those vessels, made idle by actions taken by Government entities to reduce fishing effort, as an inducement to reduce the number of vessels in overcrowded fisheries, and for possible resale of the vessels for use in other fisheries, and
- combining two or more of the above.

Limiting commercial fishing effort will result in social and economic problems for those fishermen who are displaced. Before limiting fishing, consideration must be given to the interests of both commercial and recreational fishermen when they compete for the same resource.

The Fishery Conservation and Management Act authorizes regional fishery management councils to establish limited access schemes.

Fragmented jurisdiction

Fishing off the U.S. coasts is carried on in three ocean zones :

Territorial sea (0 to 3 miles off the coastline).

Contiguous zone (3 to 12 miles offshore).

High seas or international waters, extending beyond 12 miles.

Under the 1976 act the contiguous zone will be extended from 12 to 200 miles offshore, effective March 1.

Generally, individual States have jurisdiction over the territorial sea bordering their coastlines which, in some instances, have been delegated to cities, towns, or counties. In the other zones a State may enforce regulations against its own citizens but not those of other States.

The Federal Government has jurisdiction over the contiguous zone and U.S. vessels operating on the high seas. However, except for marine mammals, endangered species, and species covered by international agreements, clear authority to manage U.S. fishing activity in these zones had not been assigned to a specific Federal agency.

Fisheries on the high seas are open to all nations. In some instances, certain fisheries are managed through international agreements, but membership in such agreements is voluntary and compliance is difficult to enforce.

Fisheries management is difficult when only one government entity is involved but becomes more difficult when several government entities are involved, particularly when States, cities, towns, and counties desire to protect local interests and political concerns.

The State-Federal Fisheries Management Program is a voluntary effort on the part of States and the National Maritime Fisheries Service and provides a means for resolving problems created by inconsistent State laws, but progress has been slow.

Public Law 94-265 provides a framework for overcoming the adverse effects of fragmented jurisdiction by assigning the responsibility to manage species harvested predominantly outside the territorial sea to regional fishery management councils and the Secretary of Commerce. Many fisheries, however, are harvested predominantly within the territorial sea and will remain under State jurisdiction. This appears to be a basic shortcoming in Public Law 94-265, because certain important species which span, or migrate between State boundaries, or beyond the territorial sea might be excluded from comprehensive and coordinated management—a must, if fish resources are to be sustained.

Possible solution

Public Law 94-265 could be amended to expand the Government's authority to include species of fish which are harvested predominantly within the territorial sea but span or migrate between States or beyond the territorial sea for which States have not voluntarily implemented effective management plans within a reasonable time.

Lack of precise data

Biological, social, and economic data are needed to make fishery management decisions. Biological data is concerned with the status of the fish stocks, their life cycles, and the effects of fishing and environmental changes on them. Although some knowledge exists on the conditions of stocks and the interdependence of various species, scientific proof of fishery conditions has not been available.

Enter into reciprocity agreements with foreign countries fishing in the U.S. 200-mile zone.

Deny other governments the right of access to U.S. waters for fishing purposes.

Impose import prohibitions on fish and fish products of other governments concerned.

Possible solutions

Should this prove to be unsuccessful, the Government might consider the following solutions.

Encourage displaced fishermen to transfer to domestic fisheries having growth potential and to fully use existing Government programs for financial and technical assistance needed.

Providing employment-restraining assistance to displaced fishermen so they may move into new jobs.

Establishing a program to buy back idle vessels of displaced fishermen.

Costs associated with harvesting

The fishing industry is subject to high costs for vessels, nets and netting, and insurance. U.S. fishing vessels cost up to 30 percent more than foreign-built vessels. At the present time, U.S. fishermen do not have the option to purchase vessels from U.S. or foreign shipyards because, pursuant to law, they cannot register foreign-built vessels in the United States. As a result, if they want to land fish in U.S. ports, it must be in U.S.-built vessels. The terms of loans to fishermen usually include high interest rates and short loan repayment periods, which may cause cash flow problems for vessel owners. One or two poor fishing seasons can ruin a fisherman financially.

Import duties on fishing nets and netting used in making nets can be as high as 50 percent. This discourages the use of foreign nets and netting and helps keep the cost of domestic nets high.

Because fishing is hazardous, the cost of hull protection and indemnity insurance average 5 to 7 percent of a fishing vessel's operating cost, excluding depreciation.

Possible solutions

Possible solutions are to:

Allow U.S. fishermen to use foreign-built vessels to land fish in domestic ports. This must be weighed against the effect such an action might have on the domestic shipbuilding industry and natural interests.

Explore possibilities for more favorable loan interest and repayment schedules. This should be a joint effort by the Government, fishermen, and banks.

Lower the tariffs on nets and netting material.

Explore the possibilities for lowering insurance rates.

Development of underutilized species

Some fish resources available to the U.S. fishing industry are considerably greater than amounts presently harvested by U.S. and foreign fishermen. Species such as croaker, mullet, and anchovy are not fished to any great extent by domestic or foreign fishermen. Species such as Pacific hake and pollock, fished intensely by foreign nations, are not sought by U.S. fishermen. Before most underused species can be marketed commercially, barriers to their use must be overcome. The fragmented structure of the industry and its common property concept, limit the availability of capital for fisheries development. In addition to dealing with these problems, development programs would have to overcome barriers in areas such as resource assessment, harvesting technology, handling and transportation, product development, processing technology, and marketing and economic analysis.

Public Law 94-265 encourages the development of fisheries which are underused or not used by U.S. fishermen. How should this be done?

Joint Federal and industry sponsored development projects, directed at overcoming major barriers to the use of a specific underutilized species or related group of species, would effectively develop those fisheries.

This approach has several advantages:

Because its scope is limited, the effort is more manageable and, therefore, more likely to succeed.

Resources can be concentrated and coordinated where needed.

The problems, and the solutions, affecting one species may be different from other species.

Cost-benefit relationships can be measured.

Possible solutions

To induce industry participation, the Government could :

Develop a management program to conserve the resource after the fishery has been developed.

Establish property rights, such as a guaranteed share of the annual quota for fishermen who pioneer the development of underutilized resources.

Encourage the use of existing Federal financial assistance programs now available to fishermen and processors where private capital is not available. The financial programs should be utilized to the extent that they can meet the needs of fishermen and processors.

Other areas where assistance might be warranted

Certain established fisheries may find it hard to expand or to remain viable because of problems in other areas. For example :

Efficient harvesting techniques and gear are available in some individual fisheries (salmon, oysters) but their use is sometimes restricted by State regulations.

In the tuna, shrimp, and clam fisheries, innovative harvesting techniques and gear need to be developed and used.

In several fisheries (oyster, crab, Atlantic groundfish) processing improvements are needed, that is, mechanization to replace manual labor.

In the oyster, herring, and crab fisheries, maintaining the quality of fresh fish and processed products is a problem.

The Atlantic groundfish, Pacific groundfish, herring, oyster, shrimp, and clam fisheries are facing marketing and distribution problems.

Competition from imported fish products hampers the Pacific coast oyster and the blue crab fisheries.

In several fisheries (crabs, shrimp, oyster, snapper/grouper) there are labor supply problems.

Possible solutions

Some Federal assistance seems warranted if the industry is to remain viable and expand. For example, the Government could undertake research and development programs to deal with technological problems. Before doing so, if at all, a congressional and/or an administration policy decision should be made on the amount of Federal effort and resources to be used.

But Congress and/or the administration will have to determine whether Federal assistance should be furnished to the industry where—

a single firm as opposed to the fishing industry or major segments of the industry benefits, or

a project is too costly when compared to possible benefits, or

a problem is common to many industries and Government assistance is furnished to none.

WORK DONE

Major areas considered in GAO's study included—

fish as a food resource,

fish as an economic resource,

environmental problems,

the role of the U.S. fishing industry,

marine recreational fishing,

the fishing industry in other nations,

Federal involvement in fisheries,

status of major fish stocks and opportunities for expanding the U.S. harvest,

major difficulties in managing fisheries, and

barriers to industry expansion and/or viability.

Many Federal laws greatly affect the fishing industry and are administered by several departments and agencies. GAO prepared a compilation and analysis of the laws to identify improvements possible through reorganization, recodification, clarification, and amendment.

GAO studied the harvesting, processing, and marketing of the more important fish species which accounted for over 80 percent of the volume and a

percent of the value of the 1974 harvest. In addition, GAO studied the potential for developing underutilized fish resources.

The fishing industry in other nations—Canada, Denmark, Japan, Mexico, Soviet Union, United Kingdom, and West German—was studied to ascertain how these countries assisted their fishing industries and to provide a basis to formulate alternatives to assist the U.S. fishing industry.

A statistical comparison of the U.S. and foreign catch of fish off the U.S. coast was prepared which shows, by species, the potential for increasing the U.S. harvest by limiting or excluding foreign nation fishing in the U.S. 200-mile zone. (See app. V.) GAO contracted with the Institute for Marine Studies, University of Washington, to examine the effect of extended fishery jurisdiction by the United States on international fisheries conventions and agreements.

During the study, GAO met with and obtained the views of Federal, international, State, and local government officials and representatives of the fishing industry, associations, cooperatives, and unions.

GAO coordinated its efforts with the following organizations conducting fishery studies:

Office of Technology Assessment, United States Congress.

Congressional Research Service, Library of Congress.

Atlantic States Marine Fisheries Commission, Gulf States Marine Fisheries Commission, and Pacific Marine Fisheries Commission.

OFFICE OF TECHNOLOGY ASSESSMENT, ESTABLISHING A 200-MILE FISHERIES ZONE, MARCH 1977

SUMMARY

In March 1977, the Fishery Conservation and Management Act of 1976 became effective, extending U.S. jurisdiction over offshore fisheries within 200 miles of the coast and making it the policy of the land to use some of the most advanced ideas available about ways to manage marine fisheries.

Implementation of the law will require a level of understanding about the fishing resources and industry that has never before been attempted by the U.S. Government. It will require development of methods of balancing biological, economic and social factors relating to fisheries in order to best serve the national needs. Most of the information necessary for this process does not yet exist.

The law establishes Regional Councils to work with the National Marine Fisheries Service of the Department of Commerce in managing fishery resource and setting out regulations, including allocation of the catch of commercial species between domestic and foreign fishermen. Preliminary regulations and catch allocations have been drawn up, but better working relationships between all interested parties are needed and many changes will be necessary in early management activities as experience is gained.

Management of the 200-mile fishery zone will, of necessity, have enforcement of regulations as an integral part if it is to accomplish restoration and conservation of fish stocks and provide the domestic fishing industry with incentive to grow. The U.S. Coast Guard will be primarily responsible for enforcing regulation of foreign fishermen and the National Marine Fisheries Service will oversee domestic fishing. Both enforcement groups are beginning their tasks by increasing existing activities. This appears appropriate for the time being, but it is likely new enforcement techniques and advanced equipment will be needed in the future. Improvements are needed in long-term evaluation of enforcement needs, costs and benefits, and attention should be given to coordinating some military information and equipment with Coast Guard requirements for fisheries.

OTA's analysis of implementation of the new 200-mile fisheries zone can be expressed in terms of the conclusions reached during the assessment, the practical and organizational problems which were discovered, and the OTA suggestions for resolving those problems.

The overall conclusions of the assessment are given here for each of the major subject areas of the report. These conclusions are grouped as they relate to:

enforcement of the U.S. fisheries regulations and jurisdiction.

management of the new fisheries zone.

data which will be needed for implementation of the law.

opportunities for expanding and revitalizing the U.S. fishing industry

which may result from implementation of the law.

These overall conclusions include four pilot projects, which are OTA's major suggestions for determining the most successful and cost-effective means of enforcing U.S. jurisdiction in the 200-mile fisheries zone.

Also included in the Summary are some of the specific problems which stand in the way of full implementation of the Fishery Conservation and Management Act of 1976.

It is the practice of the Office of Technology Assessment to make an objective analysis of a subject and not to recommend specific policy actions to the U.S. Congress. Adhering to that practice, OTA has made no policy recommendations in this report. However, due to the practical nature of this report and the desires of the committee which requested this study, it seemed appropriate in this case to make a number of specific suggestions for more effective implementation of the Fishery Conservation and Management Act of 1976. These recommendations are outlined in the Summary section and discussed in more detail where appropriate in later sections.

Throughout the Summary, page numbers are noted after individual conclusions in order to simplify reference to fuller discussion in the main text of the report.

ENFORCEMENT

Need for enforcement

Adequate management and strict enforcement offer the opportunity for future increase in fish stocks and yields due to tighter controls to prevent overfishing, less pressure on stocks which are normally taken as bycatch, less conflict among fishermen for certain grounds, less conflict between different types of equipment, and assurance of workable allocation of catch quotas among foreign and U.S. fishermen.

The existing Coast Guard enforcement plan for foreign fisheries

The Coast Guard plan of increasing its present fishery enforcement capabilities is a reasonable first step in enforcement. It is flexible in that resources can be added at a reasonable first cost and the program can be curtailed or accelerated as assumptions and need are proven or disproven by experience.

Enforcement of domestic fisheries by NMFS and USCG

The National Marine Fisheries Service present approach to enforcing regulations in domestic fisheries by means of dockside inspections may be sufficient under the new law if it is combined with a program of random at-sea inspections. However, if regulations for domestic fisheries duplicate the kinds of gear restrictions and operational controls used in foreign fisheries, more at-sea fishermen and the additional fishing vessels.

In the event that an at-sea enforcement capability is needed in domestic fisheries, the Coast Guard could use the same types of equipment and techniques which are planned for enforcement activities in foreign fisheries. However, additional facilities would be needed to cover the different areas used by domestic fishermen and the additional fishing vessels.

Techniques to improve near-term enforcement effectiveness

Several fairly simple strategies which could be activated almost immediately for enforcement have not been given favorable consideration by the Coast Guard and the National Marine Fisheries Service. Three of these are 1) establishment of an efficient reporting system which would allow domestic fishermen to aid in observing foreign fishing vessels, 2) more extensive use of observers on board foreign fishing vessels, and 3) creation of specific guidelines to be followed in granting annual fishing permits and renewing governing international fishery agreements.

Extensive use should be made of observers in a dual role: to collect data needed for management of fisheries and to observe fishing operations for enforcement functions. A near-blanket program of observers may be necessary for a dependable, cost-effective enforcement program.

Planning needed for long term enforcement

It is likely that proposed near-term enforcement capabilities will not be adequate for long-range demands. Therefore, plans should be made for further improvements in enforcement by use of remote sensing devices and other advanced technology.

Remote sensing systems for future enforcement needs

The cost of most remote sensing systems is high and it will probably be necessary to share the cost of such systems with other users. However, remote sensing devices could be expected to improve enforcement by better coverage, better performance, and a reduction of the need for expanding conventional ship and aircraft patrols of fishing areas in the future.

Transponders have good future potential for use in fisheries enforcement. Particularly when combined with Loran C, transponders can be used to detect, identify and classify fishing vessels.

New microwave radar equipment has the technical potential to supplement or supplant existing airborne radar for fisheries enforcement within the next ten years, but the cost would be very high.

Over-the-horizon radar techniques have good potential for use in fisheries enforcement. However, due to both the classified nature of most of the military work in the field and the high cost, use of this system will be contingent upon close cooperation between the Department of Defense and the Coast Guard.

Recommendations on enforcement levels and evaluation

Problem 1: No desirable level of enforcement has been determined based on a policy decision as to what level of enforcement is most desirable.

Recommendations: In order to determine the type of effort and equipment necessary, there should be a specific definition of the desirable level of enforcement followed by regular assessment of changing enforcement needs and the actual level of enforcement which has been achieved compared to the desired level. In addition, the Regional Councils should make a projection of desired enforcement actions in their areas, possible compliance inducements for fisheries in their areas, and potential domestic enforcement plans.

Problem 2: The existing Coast Guard analysis of the appropriate level of enforcement was made without benefit of an adequate method for assessing the benefits and the cost (in social, economic, political, and scientific terms) of various enforcement strategies, that is, the various combinations of aircraft, ships, electronic devices, and imposition of penalties.

Recommendation: A general analytical system is needed to provide quantitative estimates of the impacts of alternative management techniques and enforcement strategies on the quantities and prices of fish available, the state of recreational fishing, and other measures of the benefits of management.

Problem 3: Fisheries management modeling efforts currently being supported by the National Oceanic and Atmospheric Administration, such as the one at Stanford University, do not include enforcement components.

Recommendation: The Coast Guard should develop the enforcement component, so that its model could be used in conjunction with one adopted by NOAA.

RECOMMENDED PILOT PROJECTS IN ENFORCEMENT

The cost of enforcing fishery regulations in the new 200-mile zone may escalate as experience is gained in managing the fisheries, and it may be learned that a higher level of enforcement is necessary than that which is now planned. Therefore, a reasonable approach to gaining experience with different enforcement techniques is desirable in order to determine which are the most successful and cost-effective methods of achieving the goals of the Fishery Conservation and Management Act of 1976.

The research conducted during this study suggests that such experience might be most efficiently gained through a series of pilot programs in various areas of enforcement. The following four projects are an outline of the types of work which may be useful. These projects are suggested with the assumption that in the long-run, the cost of gaining sufficient experience on which to make informed choices and trade-offs in enforcement activities would be less than the cost of possible erroneous decisions about the use of very expensive electronic surveillance systems, the cost of adding large numbers of new and possibly unnecessary air and sea craft, and the cost of possibly failing to protect the fishery resources by adequate enforcement of regulations.

Included in the project discussion are rough cost estimates whenever such fiscal information was available to OTA. However, it should be pointed out that one of the primary reasons for conducting these projects would be to obtain information that will allow the appropriate agencies to make estimates of the costs of full-scale set-up and operation of certain programs. Presently, such information does not exist.

It is suggested that these projects should be conducted for at least a year, possibly more, in order to cover the entire fishing season and range of activities on any given area. At the end of the project, each should be evaluated with special attention to determining the completeness of coverage provided, the cost, the timeliness and usefulness of information obtained, and a comparison of each method with traditional enforcement activities and other possible alternatives to the pilot method.

Shipboard observers

OTA's analysis suggests that much could be learned from a pilot project in which a foreign fishery is nearly blanketed with shipboard observers who have both management and enforcement duties.

The New England region would be most suitable for such a pilot project because the fishing grounds are concentrated and foreign fishing practices are well known; many of the foreign vessels fish in groups which could simplify the arrangement of vessels with observers and control vessels without observers; and the stocks in that region are generally depleted and information for use in restoring stocks is badly needed.

About 150 foreign vessels, on the average, have traditionally fished within the 200-mile zone off New England. At this writing, the number of permit applications which had been received suggested that this number will probably go down under the 1977 catch allocations. Therefore, it appears that a total of about 100 shipboard observers would be suitable for the pilot project. These observers should be selected on the basis of experience in fishing practice and knowledge of fishery matters. If they are given enforcement duties, they should be Coast Guard personnel, instead of NMFS personnel. However, they should receive some training from NMFS in observing, collecting and reporting information of value. Some familiarity with the nation on whose vessel the observer serves would also be helpful.

Based on NMFS estimates for their existing, limited observer program, the cost of a 100-man pilot program would be roughly \$2 million plus funds for an accurate evaluation of the pilot.

Under the law, this cost is passed on to the foreign vessels. However, other fees and charges are also levied, under the law, to reimburse the U.S. for management and enforcement activities in the 200-mile zone. Since the observer program would presumably make some other expenditures covered by these levies unnecessary, the gross tonnage fee or tax on ex-vessel value of the catch could be reduced accordingly.

Transfer of military data

OTA proposes a pilot program utilizing one of the existing military systems for the collection and transfer of available surveillance data for one specific region. Some precedent for such a project already existing at the Naval Ocean Surveillance Information Center where the Coast Guard has recently detailed one officer to work on data which are of interest to the Coast Guard and have not, in the past, been processed by Navy personnel.

OTA has not investigated the feasibility of using a specific system in any region, but it appears that the Navy's West Coast network could be a likely pilot region. Any pilot project should begin with an in-depth investigation of the Navy's existing system and its ability to provide information needed for fisheries enforcement.

Some funding would be necessary to add personnel who would coordinate the transfer of fisheries related data from the Navy to the Coast Guard district in charge of fisheries enforcement in that zone.

On one hand, there may be difficulties in working with and protecting classified information and there may be a danger that this extra task might not receive adequate attention in a facility oriented to an existing military mission. However, such an information sharing program could ultimately cut costs substantially by reducing duplication of effort and facilities. It could also provide cooperative experience which might lead to sharing of other services and resources needed for enforcement and the opportunity to evaluate new technology which may be of use in fisheries enforcement.

Joint research

OTA suggests that a pilot project for cooperation and joint research could bring together the Coast Guard, Department of Defense, and the National Aeronautics and Space Administration to develop new systems and find efficient ways of using technology in a multimission context.

Such a pilot project could include joint preparation of long-range plans for determining the most appropriate research and development strategy for new technologies, identifying the needs of all potential users of such technology and analyzing the costs and benefits of developing and utilizing new technology, especially remote sensing devices.

Transponders with Loran-C

OTA suggests early implementation of a pilot program utilizing transponders in two specific regions—the Bering Sea off Alaska and the Georges Bank off New England. Since each of these areas are traditional fishing grounds, but with very different prevailing conditions, the usefulness of transponders could be evaluated for a broad range of applications by this pilot project.

The pilot programs would require the design and manufacture of LORAN-C transponder equipment specifically for this purpose. The LORAN-C network is already planned or in operation in the regions proposed. A licensing arrangement and installation technique for fitting transponders on each foreign fishing vessel entitled to fish in the region would need to be devised. Control stations and receivers on patrol ships or aircraft would need to be installed.

It is estimated that the transponder which would go on board each foreign vessel would cost less than \$2,500. Once the system were developed and installed, operational costs would be roughly equivalent to the operational cost of the aircraft carrying each control station, \$1 to \$1.6 million annually. Funds for evaluating the pilot project would be in addition to these costs.

The Georges Bank pilot program would require about 150 transponder units and a control station most likely at a Coast Guard shore base in New England. Each vessel entering the 200-mile zone at Georges Bank for fishing would be required to activate its transponder which would automatically transmit identification and location to the shore base. The shore base would keep plots of all foreign fishing activity on the banks and give this to patrol craft. Regular patrols of the region would use this information to check on any fishing activity that wasn't reported by this system.

In the Bering Sea region a similar network of transponders could be required aboard foreign fishing vessels. In this region it may be desirable to combine the transponder network with microwave radar systems already used aboard Coast Guard patrol aircraft and receiving stations also aboard the patrol craft. In this way a specific region could be covered by regular overflight, all vessels operating in the region located by radar, each vessel interrogated to determine whether an approved transponder is aboard stating ID and location, and any vessels without transponders investigated. There are several advantages to a system thus described, especially in Alaska where long distances and large areas can best be covered by aircraft and where frequent cloud cover makes visual observation difficult or impossible.

MANAGEMENT OF NEW U.S. FISHERY ZONE

New management concepts needed

New research concepts need to be developed and much new data must be gathered in order to obtain an integrated view of all the fisheries of the U.S. and to determine the optimum yield of each fishery. Optimum yield is a judgmental decision on the size of fish catch which will achieve the most advantageous combination of biological, economic and social results. However, there is presently no agreed-upon method of determining optimum yield.

Even when analytical methods and reliable data are generated, there will be uncertainty about stock assessments and other projections used for fishery management. Techniques for dealing with that uncertainty will be necessary.

Relationships between Federal agencies and regional councils

It is possible that better accountability for the existence and the reliability of data provided by National Marine Fisheries Service (NMFS) to the Regional Councils could be achieved if the NMFS member on the councils were the head of the regional fisheries research center rather than, or in addition to, the Regional Director.

Conflicts can probably be expected in the future between the Regional Councils and the NMFS laboratories over the division of research funds because of some local fishermen's mistrust of national NMFS operations and council desires to break out of the traditional NMFS research patterns. Conflicts may evolve over who does specific research tasks. Such conflicts may delay collection of much-

needed information or cause duplication of research effort; however, there is no framework—other than informal negotiations between NMFS and the councils—for resolving such conflicts.

NMFS management guidelines needed

No decisions have been made within NMFS as to who will be responsible for research, data collecting, and development of analytical methods. There is a division of opinions among NMFS staff as to whether recommendations on data and methods should be made by NMFS to the councils or by the councils to NMFS.

The preliminary management plans prepared by NMFS were not coordinated in content or format. Guidelines for presentation of management plans were not promulgated. This failure to standardize operations with NMFS before the initial plans were written may have complicated the councils' job of preparing succeeding plans by failing to give them a model after which to pattern their work. It may also perpetuate regional differences within NMFS and complicate the national review process.

Management information needed

Much must be learned about the effectiveness of management techniques and presentation of plans. However, the most pressing need for improvement is in the area of developing and considering economic, social and biological data to be used to modify the catch figures presented in the preliminary plans.

Recommendation for management planning

Problem 1: There is no deadline for preparation of domestic fishery management plans and no priority listing of domestic fisheries for which management plans should be prepared.

Recommendation: NMFS should prepare a priority listing of domestic fisheries for which management plans are needed, delineating the needs and citing available data.

INFORMATION NEEDED TO IMPLEMENT P.L. 94-265

New evaluation of fisheries stock information needed

The new Regional Councils could make a substantial improvement in the old system of making estimates of fishery yields and advice about health of stocks available only to international governing bodies. The councils could interpret scientific data on stocks, publish it widely, and provide an opportunity for continual access to information and debate of the issues by interested parties. Input by and involvement of users and other public parties is crucial to the success of fishery management.

Status of stock information

Present assessments of heavily utilized stocks are quite accurate. However, projections of sustainable yields in the future are subject to large uncertainties due to effects of interspecies relationships, environmental change, fishing effort and other unknown natural variations.

Presently no stock has adequate quantitative data on all items necessary to develop estimates of maximum potential yields that can be harvested without reducing the parent stock.

Stock assessment needs

Since estimates about the condition of a stock are basically judgmental anyway, it may be far more cost effective to agree upon a few key indicators of the health and size of the stock rather than to attempt to assess all possible indicators.

Because of pressures to expand existing stock assessment methodologies to provide data for near-term decision, pressure to treat fishery information as a precise science, and the lack of validity for existing methods of research, a program should be undertaken to improve the stock assessment data which will be used and establish future research priorities.

Foreign investment information

Mandatory disclosure of the actual extent of foreign investment in U.S. fish processing and wholesale operations would be necessary in order to determine if foreign investment results in uncontrolled foreign fishing or has an adverse effect on the competitive position of U.S. firms. However, such disclosure is not presently required.

Economic information needs

Economics and statistics staffs are being added to Regional Fisheries Research Centers, but these staffs are not likely to have the time or direction to address national problems. These staffs cannot be considered a substitute for a central economics research and planning capability in NMFS.

Information needed on social effects of fisheries management

The Regional Councils will need to know the major social effects of the decisions made under the new law in order to make sensible alterations in fisheries regulations as conditions continue to change.

Recommendation for improved management information

Problem 1: Most of the regional economic studies which have been done and the economic and social data generated by NMFS would be of limited use to the Regional Councils in their management work because it is outdated or not maintained in a format applicable to fisheries managers.

Recommendation: The National Marine Fisheries Service consulting with the Regional Councils could evaluate the economic and social data needs and the suggestions for improvement which are outlined in this report and develop a comprehensive management information system.

FUTURE DEVELOPMENTS IN THE FISHING INDUSTRY

Information needed to evaluate opportunities

In order to make decisions on how to improve an existing fishery or develop a new fishery by enhancement techniques, new information is necessary. This includes an intensive and integrated examination of all facets of a fishery: resource assessment, harvest and processing technologies and costs; market potentials; and institutional factors including artificial barriers to trade. None of this information presently exists within the Federal agencies.

Sufficient data about various segments of the fishing industry are not now available for determining what, if any, actions should be taken by the government to encourage growth in the fishing industry.

Underutilized species not defined

In addition to the possible prices which presently underutilized species might bring, stock assessments and projections of yield from the species are needed in order to determine if the stocks can sustain a market.

Recommendations for addressing new opportunities

Recommendation: Data collected by the General Accounting Office, the Eastland Resolution group, the Office of Technology Assessment, and NMFS should be synthesized and analyzed by a committee of the Regional Councils which could identify missing information, fill the gaps itself or contract for research, and make recommendations for congressional action or administrative changes which would be helpful in revitalizing the fishing industry.

Recommendation: The Federal fishery information structure that exists in Sea Grant and NMFS should be expanded and improved to reach a larger segment of the industry with a variety of information from many sources.

Thank you all very much for your patience, the hearing is concluded.
[Thereupon, at 12:20 p.m. the hearing was adjourned.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

JUNE 28, 1977.

Mr. GARY CONKLING,
Legislative Assistant to U.S. Representative Les Au Coin, Cannon House Office Building, Washington, D.C.

DEAR GARY: I enjoyed visiting with you at the Oregon Bankers Association meeting. As promised, I have set out below a few thoughts on my experiences with government insured loan programs. Many of these points were covered in the testimony I gave before a hearing held here in Newport on April 29, 1977 on H.R. 4739 (National Aquaculture Organic Act of 1977).

As you know, this bill would provide, among other things, for a loan guarantee program. I am totally for loan guarantee programs because it allows us, a small bank, to make large, higher risk loans that have potentially great benefit to the borrower and the community.

Financing of commercial fishing boats is not even considered by most banks. Commercial fishing, and related fish processing, is very important to Newport so we had to find a way to support this needed industry. We explored and found two government agencies with programs to help. They are the Small Business Administration and The National Marine Fisheries Service under the Department of Commerce's National Oceanic and Atmospheric Administration.

Right now, we have three fishing vessel loans which we are putting together to submit to the Small Business Administration. As of the end of May, we had processed six SBA guaranteed fishing vessel loans, totaling \$770,000 and only one for \$120,000 under The National Marine Fisheries Service. Actually, even though it is approved, the NMFS loan still isn't completed after seven months.

NMFS has some interesting rules. One is that they will only guarantee loans to finance new fishing vessels or costs to substantially recondition existing vessels. The fisherman must have 25 percent equity. Additionally, the vessel must be used in an approved fishery (for example, king crab and salmon are not approved). Another rule is that inspections of the completed vessels and closing of loans must be handled by a representative of NMFS. In other words, NMFS will issue a commitment but the guarantee is subject to the final completion and inspection. NMFS also collects .5 percent on the unpaid balance.

Here's a list of my observations about these rules:

(1) NMFS is no help to new fishermen where the risk is greatest because, generally speaking, the new fisherman usually can't afford 25 percent down on even a used vessel, let alone a new one.

(2) Nearly every successful fisherman now engaged in the approved fisheries, such as bottom fishing, shrimping, crabbing, etc., started with a troller fishing for salmon which is not an approved fishery.

(3) Even successful fishermen engaged in approved fisheries frequently have difficulty raising 25 percent of the cost of a new vessel which ranges over \$300,000 for something in the 65 to 75 foot size.

(4) The need to have the vessel totally completed and inspected before the guarantee goes on creates interesting problems. The \$120,000 loan referred to in the fourth paragraph of this letter is presently on our books as an unguaranteed loan. The reason is that the borrower had to make progress payments on the vessel and pay in full upon acceptance. He is bringing the vessel through the Panama Canal on his way here to Newport. When he gets here, we will get a representative of NMFS from Seattle down here to inspect the vessel and finally be able to close the loan. If all goes well and the vessel passes the NMFS inspection, we will have an insured loan to replace our existing uninsured loan. As I see it, we stand all the risk of the construction period (contractors can go broke and the borrower and the bank would own a half finished vessel). Upon the successful completion, we get a guaranteed loan which has a rate of return at least .5 percent less than normal because our borrower has to pay that much to NMFS on top of our loan rate.

(5) By requiring that NMFS people inspect vessels and close loans, they put a time burden on the few people they have to cover Alaska, Washington and Oregon, adding to the delay.

I can see that this letter is taking on the proportions of a book. However, if other bankers' experiences are the same as ours, it will hurt all government guarantee programs and eventually the people these programs are designed to help.

OK, now I'd like to compare the SBA program—again from our point of view—and conclude with some suggestions.

(1) SBA publishes maximum rates they will consider on loan guarantee requests. They are usually high enough to make it attractive to the lender and yet better than the borrower might otherwise be able to get because he doesn't have to pay "points" or .5 percent on top of the lender's rate (like NMFS) or anything else.

(2) SBA has a number of qualified loan personnel working with a variety of industries. Its true they aren't specialists but good lending principals are basically the same in all industries. With the larger staff, they are flexible and they can respond more quickly.

(3) SBA will accept the appraisals of a qualified marine surveyor. They also permit an attorney or the lender to close loans. This is far more practical, in my opinion, than the NMFS approach.

(4) SBA will, for the right borrower, guarantee loans where the borrower's equity is less than 25 percent. They don't exclude used vessels. They don't exclude certain fisheries.

It should be noted at this point, however, that NMFS also gets involved in SBA guaranteed fishing vessel loans. Before SBA can guarantee a fishing vessel loan, or even accept an application, the borrower has to be declined by NMFS. This (the turn down process) has been fairly routine until recently.

A couple of months ago a borrower, who needed 85 per cent financing on a new vessel, couldn't get a turn down letter. NMFS's reason was that he was eligible (new vessel, etc.) but unqualified (didn't have the needed 25 per cent down). Or maybe, they said, he was qualified but ineligible but it was purely semantics. We never did get a turn down letter but SBA accepted a letter from NMFS to the borrower that, in effect, said "we can't turn you down but we can't make the loan". That application is now approved and the vessel is being constructed.

Here then, finally, is my suggestion and reasons:

Use one agency to handle the loan approval process for all programs. We would like to see the SBA in that role because they have already in place a group of qualified loan officers. All they need is guidelines from the Secretary of Commerce or whomever. We think there would be many advantages:

(1) The borrower and lender have only one place to go with an application.

(2) Forms could be combined.

(3) Manpower could be combined for greater flexibility with quicker response.

(4) The agency could decide which program the application best fits. I'm certain good loans get turned down because lenders just can't keep up with who (which agency) is doing what.

(5) Elimination of agency "territorial" disputes. Sounds ridiculous but I'm certain it exists. Who should care whether a loan is made under a NMFS program or the proposed Aquaculture program, or the Farm Home Administration's rural credit program, etc., as long as the borrower is helped.

I'm sure the idea has come up before and that there are good arguments against it. I just hate the thought of yet another agency to try to understand and work with. So please, if we can't undo what's already been done, let's, in the future, try to use an existing agency.

Thanks for taking the time to talk with me and read this rambling letter. Abe Lincoln said something like, "I didn't have time to make it short." That's my problem.

Sincerely,

D. L. BARTH, *President.*

TESTIMONY OF DON BARTH, PRESIDENT OF THE BANK OF NEWPORT

Thank you, Mr. Becker, Mr. Chairman and distinguished members of this committee. I share Tom Beckers enthusiasms for Bill No. H.R. 4739 and what it can do for the much needed Aquaculture industry.

I joined The Bank of Newport just over one year ago. It became apparent to me that another related industry . . . commercial fishing and processing . . . was hurting from the lack of financing. I explored both the Small Business Administration and the National Marine Fisheries Service which operates under the Department of Commerce's National Oceanic and Atmospheric Administration. To date we have processed six fishing vessel loans under the SBA program totaling \$770,000 and one for \$120,000 under NMFS. None of these loans could have been made without government guarantees. In my testimony today I will draw on my experiences and observations in dealing with these two agencies and I will speak only to Section 8, "Guaranteeing of Obligations Issued for Aquaculture Facilities," related Sections 9 and 10, and Section 11, "Insurance Against Losses Incurred in Aquaculture Facility Operations."

The bill provides for the Secretary to approve an obligor (page 16, line 18). Instead of using yet another agency . . . like National Marine Fisheries Service under the Secretary of Commerce . . . I would like to suggest use of the Small Business Administration. The SBA could be empowered to handle the approval process with the Secretary setting forth guidelines. I am pleased that the bill would require only 12½ percent equity (page 16, line 24) and would allow for a 25-year amortization (page 17, line 4). The National Marine Fisheries Service requires a commercial fisherman to have 25 percent equity in a new vessel. This eliminates many otherwise eligible borrowers. Two of our SBA guaranteed loans were turned down by NMFS because they did not have the required 25 percent.

In fact, in order for SBA to consider any fishing vessel loan . . . the borrower must first be declined by NMFS. Other reasons for a NMFS decline are that the vessel is not new or is used in a fishery that isn't qualified. I suppose another alternative would be to let NMFS administer the Aquaculture guaranteed loan program under direction and guidelines of the Secretary. This would be better than establishing yet another agency.

Based on our experience with both the SBA and NMFS we would rather see the SBA given this authority. In fact, we would like to see the SBA assume the responsibility for administering the NMFS program also. That way the borrower and lender have only one agency to go to . . . and that agency . . . acting on direction from the Secretary . . . could determine which program the borrower best qualified for. The SBA already has qualified loan personnel and has a review and approval process already in place.

To be perfectly frank . . . again based on our experience . . . I believe we will decline to work with a borrower who is obtaining a guarantee through NMFS unless the circumstances leave us no alternative. It's just too time consuming and cumbersome for the rate of return.

This brings me to another point. The bill provides for a fee for the guarantee of up to one-half of one per cent (page 17, line 22). This again is similar to the NMFS program which charges the borrower one-half of one per cent on top of the normal interest rate paid to the lender. SBA . . . by contrast . . . charges an up-front origination fee of one per cent and nothing more. It's true that NMFS guarantee is a full 100 percent guarantee . . . while SBA's is a 90 percent guarantee . . . but I would rather have a 90 percent guarantee and be able to keep . . . as the lender . . . the extra one-half per cent. I notice also that the bill provides for a one-half per cent loan origination fee (page 18, line 10). To repeat . . . as a lender . . . I prefer the SBA fee arrangement.

The bill would also establish an insurance program (page 27, line 15). This is very much needed. I do have some suggestions on how that program might be set up. I hope the Secretary would use the same program already in place for either the National Flood Insurance Program or the Crop Insurance Program under the Secretary of Agriculture. We prefer the system set up for the subsidized National Flood Insurance program because a borrower can continue to deal with his own insurance agent for all of his insurance needs.

At this time, Mr. Chairman, Mr. Becker and I will be happy to answer any questions. Obviously, we appreciate the opportunity to give testimony regarding this much needed legislation.

U.S. SENATE,
Washington, D.C., July 29, 1977.

Memorandum to: Oregon Steelheaders.

From: Senator Bob Packwood.

Subject: Official Commercial Committee fishing hearing, August 20, 1977.

The continued enjoyment of our recreational and sport fisheries is directly tied to the way in which we protect these resources. As a member of the Senate Commerce Committee, which oversees virtually all fishing issues, I intend to hold a hearing on the general subject of our fisheries on August 20, 1977, in Newport, Oregon.

The hearing is intended as a forum for people interested in our commercial and sport fisheries to air their concerns and make suggestions for legislative action that needs to be taken. Representatives from various fishing organizations, both public and private, will be appearing. I am writing in the hope that if you have any issues which you would like to bring to my attention, you will feel free to do so on the 20th.

You are welcome to testify personally or submit comments. Please indicate in the space below if you would like to appear or submit material. Then refold this letter so that the address of my Portland Office appears on the front and drop it in any mail box. No stamp is necessary. Even if you would rather not testify, I still hope to see you at this hearing. I hope it will pave the way for future legislative action on behalf of our commercial fishermen.

The hearing begins at 9 a.m., August 20, 1977, at the OSU Marine Science Center in Newport.

— I would like to testify in person.

— I would like to submit comments for the record.

COMMENTS RECEIVED BY SENATOR PACKWOOD

PORTLAND, OREG.

Let's get the commercial gill netters out of the Columbia River. They are wrecking the fish runs and selling the fish (which are produced by Sports Fishermen Funds) to Japan, Canada, etc.

ROY N. TAYLOR.

SALEM, OREG.

BOB: If you are really concerned with the interest of Oregon's sport fishermen let us hear from you in opposition to the Siletz Indian bill except with an outright disclaimer of special hunting and fishing privileges.

The Washington State nightmare is ample reason why. The Klamath situation is another complete reason. The creation of special privilege minorities is a third.

I will be in Alaska on this date.

JOE COFFEY.

U.S. SENATE,
Washington, D.C., July 29, 1977.

Memorandum to: Oregon commercial fishermen.

From: Senator Bob Packwood.

Subject: Official Commercial Committee hearing in Oregon, August 20, 1977.

As you perhaps know, the Senate Commerce Committee oversees virtually all issues relating to commercial fishing. Everything from the 200-Mile Fishing Act to its enforcement by the Coast Guard, as well as efforts to develop our commercial fisheries are handled in this Committee.

On August 20, 1977, I will be chairing a Commerce Committee hearing in Newport on the general topic of our commercial fisheries, and would greatly appreciate your attendance. I would like to learn first-hand about your problems, and listen to your comments and suggestions, so that as a member of the Committee, I can represent your concerns forcefully and effectively.

The range of subjects to be covered is up to you. You are welcome to testify personally or submit comments. Please indicate in the space below if you would like to appear or submit material. Then refold this letter so that the address of my Portland Office appears on the front and drop it in any mail box. No stamp is necessary. My Portland staff will then get back in touch with you. Even if you would rather not testify, I still hope to see you at this hearing.

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— I would like to testify in person.

— I would like to submit comments for the record.

COMMENTS RECEIVED BY SENATOR PACKWOOD

NEWPORT, OREG.

We have a complaint that you no doubt have heard numerous times. Its about the great number of seals that harass fishermen on the Umpqua River. There are no controls during commercial shad season so the seals move in and even go way up river to eat or ruin the fish from the nets. No doubt they are just as plentiful during other times of the year but we noticed them night after night during the 50 days in the spring.

Couldn't fishermen legally protect their catches from seals? Couldn't the number of seals be cut down in some way? One night alone during the fishing seals went down our net and took fish out whole or in part, yet we had to stand idly by and let them. After all they are just seeking food. Some fish are left in the net without heads, a bite taken from the belly etc.

Maybe you could visit a commercial fishermen down there and find out more. My husband and I have quit fishing commercially but still hate the idea of seals making it tough for fishermen.

Sincerely,

TATE AND JEANNE CLOE.

SALEM, OREG.

I am presently crabbing out of Crescent City, Calif., but will probably be through soon. I will make every effort to be at this hearing. Two subjects I would like to see discussed are limited entry and crab pot regulations.

VERNON D. PAPERFUS.

REEDSPORT, OREG.

A man's boat should be same as his home—free from search without warrant.

D. L. SPEAKMAN.

EUGENE, OREG.

I will be fishing, I believe most fishermen will be at least tuna or salmon. (Subject) Closer look at regulations for Salmon restrictions of 26 and 28 inch fish. Last Saturday I released 40 to 50 fish 25 inches long, 6 lb., ½ will die. At least they should be used even if they are bought at 50¢ a lb.—and given to Government food needs, hospitals, et cetera. They are wasted now.

A Government subsidy for small boats to make tuna and salmon fishing more businesslike. At least even the best and well financed fishermen do not make a good return on investment. Some due self-imposed problems.

MAOK R. FOLLMER.

PORTLAND, OREG., August 10, 1977.

To: Senator Bob Packwood.

Subject: Commerce Committee Hearing August 20, Newport, Oreg., Comments for the record.

My name is Walter L. Cline of 5437 S.W. Garden Home Rd., Portland, Oregon. I am the Oregon Coordinator on the Columbia River Fishery Committee of the Northwest Steelheaders Councils of Oregon and Washington.

The Steelheaders are well known for their efforts to protect, enhance, and improve the cold water fisheries. The problems are many. This letter, however, is addressed to only one serious problem that we think your Committee should be cognizant of.

The problem is the tremendous increase in the number of seals and sealions in the estuaries of our rivers and in the upstream areas as well. During last years spring chinook runs in the Columbia River the seals were observed as far upstream as Bonneville Dam, and in the Willamette to the city limits of Portland.

It is estimated that between 500 and 1,000 seals were in the Columbia and tributaries at the time of the spring run. Using the minimum of 500 seals at one ten pound fish per day would equal a kill of 15,000 salmon per month. This is a serious depletion of an upriver run that is already endangered.

We have heard that hatcheries on the Columbia and tributaries are seeing seal damage on both salmon and steelhead that were lucky enough to escape. We are currently surveying this to verify and develop the figures.

This seal population explosion and the resultant fish loss is not limited to the Columbia. Last week I observed a herd of approximately 150 resting on a sand bar out from Garibaldi on Tillamook Bay. The bay had large numbers of salmon and steelhead smolt in it and I suspect that the seals were feeding on them.

We would like your Committee to verify that this is a problem and then explore the Federal legislative action necessary to help solve it.

Respectfully Submitted.

WALTER L. CLINE.

EUGENE, OREG., *August 15, 1977.*

Re: Comments for the record.

To: Senator Packwood,

From: Price Roop, commercial fisherman and teacher.

(1) Thank you for the invitation to 9:00 A.M., August 20 meetings in Newport.

(a) If the wind is blowing too hard to fish or if my boat breaks down necessitating layover, then I can attend. Otherwise I have to be engaged in fishing as I am sure most of the active fishermen will be.

(b) A midwinter or off season date would be a considerate time for the next scheduled hearing.

(2) During the first 17 days of the Coho season this year, I was unable to fish 4 days because of the wind and bar conditions. As you can easily confirm, I was not alone in this respect. Since then, we have lost an additional 13 days.

I am not hesitant to brave the elements in my boat, but I am also not foolish to risk life and property, when odds are stacked against us.

(3) Since we are expected to show a profit every 7 years (rumor has it that it is now changed to 3) by I.R.S., then additional help for increased salmon runs, improved bar conditions, and stable prices for gear, fish, fuel, moorage, and licenses should be given.

(4) Artificial reefs up and down the coast in barren sand floors would be of some help.

Thanks,

PRICE H. ROOP.

SOUTH BEACH, OREG., *August 24, 1977.*

Senator ROBERT PACKWOOD,
Portland, Oreg.

DEAR SENATOR PACKWOOD: Thank you very much for the hearings on Saturday last in Newport. They were of value to us. I think, although I sometimes wonder how you bear up under the load of such disjointed rhetoric. I'd like to set down on paper a few points which time didn't permit in my testimony.

First of all, some of my feelings on the role of NMFS. I probably sound highly critical when I talk of NMFS; I have great respect for many individuals in this service. However, their track record leaves something to be desired if you examine the completion of various projects and programs. I question also the abandon with which they jump from project to project. Consider where is MarMap to date? Where is the master plan? What about the FPC plant in Aberdeen? What about Sea Freeze Pacific and Sea Freeze Atlantic . . . ad infinitum? I'm very suspicious of their attempts to gain control over the purse strings of the Regional Councils. I honestly see the service in the position of conflict of interest. They vote on the Regional Councils and hence take part in the preparation of the management plans, yet they have critical review power in the Department of Commerce in Washington. They pass upon candidates proposed for posts on the Regional Council and the advisory groups. And finally they have their own vested interests in programs which can and have gotten us into trouble. For example, the preliminary management program plans for this first year were prepared by NMFS. Through an oversight, the Poles and the Russians e allowed to make directed sets on rock fish, Pacific ocean perch, black cod,

etc., up to the amount of the incidental catch quotas. In previous years under the bi-lateral treaties the foreigners were not allowed to do this. I ironically add that the incidental catch quota of the Russians and Poles on perch and rock fish exceed the entire landings for these species by the total Oregon fleet last year.

I know that a mutual friend, Andy Nasburg of Coos Bay, has testified to you that he believes that NMFS doesn't have appropriate programs for vessel construction financing; that SPA is a better route. Andy is quite correct in this. The trawler that I am contemplating constructing will cost some \$750,000-\$800,000. The NMFS vessel obligation guarantee program demands an equity of 25 per cent, plus 8 per cent of the equity for operating capital. If a fisherman has 33 per cent of \$800,000, he doesn't need anyone. I think the final proof of the value of their program is to ask the cogent question: how many vessels have been financed under the program this year? I don't know about the rest of the country; I know of only one loan in progress in this region.

To my way of thinking, none of the current programs, except SBA, make sense to a fisherman constructing a modern, big vessel in our fisheries. PCA's pay off terms of seven years are much too short and the interest rate can slide. The witness from PCA gave impressive testimony, but the vast majority of the loans furnished by PCA were for the acquisition of second-hand boats—not for new construction. So one could legitimately question the value of this investment, particularly if seeking additions to the fleet to more effectively harvest a greater share of our fishery resources. Actually, what PCA proposes in legislation—to extend the terms of vessel loans to 15 years—is admirable, particularly if they combine the financing charge with a second mortgage to the Small Business Association. When you construct a new trawler like my new one, of some \$800,000 value, I think 15 per cent equity contribution by the fisherman is sufficient. None of the programs, except SBA, will consider this low a fisherman investment. We are going to require additions to the fleet. Current financing programs will not bring about this required investment in truly efficient boats. They will continue to allow swapping second hand boats.

I would really like to see tax incentives increased for processing plants. Currently, it's very difficult for a plant to construct the scale of investment needed to bring in processing capabilities for hake and pollack in Alaska when they realize that there are absolutely no government advocates, laws, regulations, etc. that would mitigate against foreigners dumping product into the international market as well as the domestic market for these species. I would refer you to a recent completed study by Dr. Virgil Norton of the University of Rhode Island which effectively proves that the average rate of subsidy on fresh bottom fish products coming out of eastern Canada is approximately 30 cents a pound. The Canadians do and have subsidized vessel construction, plant construction, and product sales abroad. OMB has told us many times to compete in a free market. We are quite willing to do so. Are the foreigners? Better put: is the U.S. government ever going to renounce its stance of benign neglect of this unfair competition? Enbrevé, I really do think the plants are going to need incentives, perhaps an extension of the provision of the capital construction funds might be one step. Increased investment credits for underutilized species products and marketing might be another. Perhaps accelerated depreciation of equipment, bought for underutilized species, extra investment credit deductions on taxes for numbers of new jobs created, etc.?

Finally, the one thing this industry needs is to be treated by our government as food producers. There are a great many programs that ranchers and farmers enjoy that we are denied such as free market reports, direct aid in marketing efforts (I understand that American farmers receive \$5,000,000,000 annually from the Department of Agriculture). For all these reasons, I urge you to study what we said in the Eastland Fish Survey, even though many of our feelings were deleted (perhaps necessarily so). The Eastland survey was the voice of working commercial and recreational fisherman. It was largely unanimous, and we think there is a real need to have a direct voice to the Congress. As I said in my testimony, most of us regard the Congress as friends of the industry; the same regard is not extended to the executive branch of the U.S. Government.

There is a very good book that was published last year by the "National Fisherman" called, "Kiss It Goodbye, Kiddo." The subtitle of the book is "The Decline of the New England Ground Fishery." If there is any culprit in the destruction of that industry it's the neglect of the Executive, coupled with subsidies to foreign fishery industries which killed that fishery.

We are tired of having the Congress told by such agencies as NMFS and OMB and GAO that we are inefficient, that somehow it's our fault if vessels are decrepit and markets are limited. I think that we Americans are the most efficient fishermen in the world. I would ask any critic to look at the Alaskan king crab industry or the Southern shrimp fleet, and—until recently—the California tuna purse seine fleet, as examples of our effectiveness—if given open market opportunities. My vessel can and will compete economically with trawlers from any country on earth from the standpoints of return on investment, return to labor, dollar cost per pound of fish product, etc.

I'm damned sick and tired of picking up the "Wall Street Journal" or the "New York Times" or "Forbes" and reading again and again that some fat cat in NOAA or NMFS is bemoaning the backward American fisherman. A recent example of this was an article in the "Atlantic" August 1977, "The Politics of Fish" by William Warner. The efficient West German operation of which he writes is subsidized to the extent of 40 per cent on all fishing vessel construction by the government, better than 50 per cent construction subsidy on plant construction in the last five years, extra tax credit from the West German government and subsidies on all products exported. You give me that kind of financing and I'd show you a hell of an income statement.

Thank you for putting up with this diatribe. What I think we fishermen want more than anything else is to have a reasonable voice in determining our future and managing the resources upon which we depend. The Congress gave us such a chance. I think we tried to tell the government in the Eastland Fishery Survey how we think this voice can be extended and heard clearly by the Congress at little extra cost to the government.

Thanks again for coming to Newport.

Sincerely yours,

R. BARRY FISHER,
Captain F/V *Escalibur*.

Re Official Commerce Committee Hearing, Newport, August 20, 1977.

Date: August 28, 1977.

To: Senator Bob Packwood, Senate Office Bldg., Washington, D.C.

From: Kay Bisbee, Hwy 34 Box 3915 Waldport, Oregon

The hearing was an interesting one. You should be congratulated in brushing aside verbiage to get at the nitty gritty, much to the consternation of some of the witnesses.

I agree with: 1. Research woefully short—why though, spend research dollars with the Yaquina (OMS vessel) cruising off S. America when we have so many problems—maybe a nice midwinter junket? 2. Wicks "I believe sea mammal control" needed, fisherman have said this for years as there is no other predator to the seal and sea lion with explosive increases since the Sea Mammal Act. 3. Forest Service needs pressure for fish consideration in stream protection. 4. "Better foreign fishing take monitoring." 5. Martin: "Protection of resource wherever salmon go in the sea if endangers resource. 6. Use of metal or plastic tags by fish catchers (Sport, Charter, Indian) Commercial could use a device like skin brand. that might take care of the tax write off sports too, as there would be a clear record whether they were really fishing or not commercially. Think this a darn good idea, like deer tags. Market control of poaching.

I disagree with: 1. McKean (I think) that council sessions should be in secret rather than in "fishbowl", fish are in fishbowl, why not council? What better way to acquaint public with needs and problems? It is the public's money. 2. Hudson "Commercial fishing is for the public" not so, it is only for the wealthy public, what person can afford \$3 a salmon? Aquaculture may help solve this, I hope so fish protein is an excellent type of protein. Lower income now buy whiting (hake via Russian fisherman, via Mexico processing?) and probably cat food. 3. Indian treaties cannot be changed—the Senate can redefine treaties if they had the courage to say in 1977 not 1850. Indians use all modern techniques in fishing—so why shouldn't they be regulated by the same rules all citizens are?

Some suggestions from a plain old citizen with no axe to grind:

1. All fishing resource technique (other than aquaculture) based on successful spawning. SOMEBODY should have the authority to say:

(a) To Forest Service: No spray fish killing (or food chain aquatic food) in headwaters—no rock crushing or road building during critical periods of

spawning. Charged with rehabilitation of stream beds ruined by past logging practices.

(b) To Dept. of Agriculture: No spray with pesticide or herbicide (24d 245T on Tansy Ragwort by unknowing farmers has contaminated many bankside and streams)

(c) To Timber industry: 1 percent (or whatever it takes) of selling price per 1000 bf. for stream—estuary rehabilitation—they've caused the major damage, it is time they face up to this fact with money to help. Sure they'd squeal, it is unfortunate that the salmon can't.

(d) To Highway commission: All culverts of streams formerly used by fish to spawn (and there are a lot of them) shall be of the "fish assist baffle" types, and furthermore any damage to streams from roadbuilding shall be assessed against them for restoration.

(e) To Courts that it shall be mandatory that all poachers, and illegal fishing by game hogs be faced with jail sentence.

I wish that this portion be included in the hearing.

PACIFIC COAST FEDERATION OF
FISHERMEN'S ASSOCIATIONS INCORPORATED,
SAUSALITO, CALIF., *September 17, 1977.*

HON. ROBERT PACKWOOD
*U.S. Senate, New Senate Office Building
Washington, D.C.*

DEAR SENATOR PACKWOOD: The following is an expansion upon the brief remarks I made at the oversight hearings on fishing at Newport on 20 August.

On behalf of the Pacific Coast Federation of Fishermen's Associations I would like to cover the three following areas. First, the Fishery Conservation and Management Act of 1976—the Pacific Fishery Management Council and the adverse actions taken against the commercial troll salmon fleet. Second, I would like to discuss the need for fishery development legislation and finally the matter of foreign involvement in the U.S. fisheries.

THE F.C.M.A. AND RELATED PROBLEMS

Congressman Robert Leggett, one of the supporters of HR200, The Fishery Conservation and Management Act of 1976 said he felt this legislation will be the "renaissance" of the U.S. fisheries. Indeed it should be, enabling this nation for the first time ever to control the harvest of the fisheries off of our coast to provide for the optimum use of those stocks for the nation. The commercial salmon fisherman—the troller was one of the original groups of fishermen calling for the extension of this nation's fisheries jurisdiction to 200 miles and salmon trollers were staunch supporters of HR200. As ocean fishermen they saw first hand the huge take by foreign fleets of fish off our coasts including, and despite denials by N.M.F.S. and others, salmon.

To these fishermen taking the pressure of foreign fleets off salmon would help aid depressed stocks of these fish, though most salmon fishermen were not naive enough to believe this was the answer to the salmon problem. The heart of that problem was in the spawning streams and rivers. It was indeed ironic then that these same fishermen would feel first the brunt of a law they helped support.

As the temporary Chairman of the Salmon Advisory Subpanel of the Council and as the California troll representative to that panel I have watched the development of the 1977 salmon regulations or the "plan" as the Council chooses to call it. Initially the Council voted that it would develop a plan for salmon looking at these fish throughout their range which included their inland habitat. However this quickly changed as the Council quickly realized the complexity of salmon and also, I believe, because inland management would interfere with the authority of the state directors on the Council.

Both the state directors for Washington and Oregon called for a "plan" for 1979 because of "emergency conditions" they said existed on the Columbia and certain Washington coastal streams. The problem was one of under escapement to those rivers and streams. Larger escapement, it was claimed, was needed to meet both Treaty Indian and non Indian gillnet fisheries, to meet inland recreational needs and finally for propagation. To develop such a "plan" an artificial unit was created, the so-called ocean salmon to be managed within the 3 +-
mle jurisdiction.

I do not believe anyone would deny that problems existed on the Columbia and on certain Washington coastal streams and that these problems were compounded by the earlier lower Federal Court decisions. However the Council was party to none of these decisions and indeed most of the decisions came prior to the signing of the F.C.M.A. The problem it seemed to me was really one between the fisheries directors and their respective state legislatures. The Council was under no duty to act absent a Fishery Management Plan. To date no Fishery Management Plan has been developed for any other fishery in the P.F.M.C.'s jurisdiction. But, the development of a F.M.P. for salmon was a means of getting around problems with the state legislatures—our elected representatives.

Even the extent of the problem of escapement we believe was greatly exaggerated. During 1976 there was escapement over and above the Treaty Indian allotments in certain areas. In fact in some instances there was not only more than the allotment available, there was more than they were capable of harvesting. For the non Treaty Indian gillnetter found down river the problem was different. Due to the tremendous growth of their gillnet fleet the time allowed for fishing has been severely curtailed and indeed it would have to be since gillnets have the demonstrated ability to overfish a stock. However, the problems of the gillnetters had been compounded by poor predictions of our returns by fishery managers resulting in greater curtailment than was necessary. In any event the problem was as California Director of Fish & Game Charles Fullerton stated, a "state problem, one which the Council should not get involved."

If curtailment of the ocean users was necessary the states, as has been long demonstrated by California, have the power to enact such control—well beyond 3 miles, both through state landing laws and state control over their citizens.

During the time the decision to regulate the ocean users was being made, I believe, I was naively working under a type of "youthful optimism" believing that great things would come from the Salmon Advisors. As chairman I hoped the work of the Salmon Advisory Panel would be akin to that of the California Citizens Advisory Committee for Salmon and Steelhead Trout. That committee, composed of commercial and sport fishermen, as well as, processors had presented three reports to the California Legislature that both identified the problems of salmon and suggested positive actions that could be taken to enhance the salmon resource. In their second report to the Legislature, the Committee stated "good salmon and steelhead management is a marriage of environmental protection and restoration, artificial propagation and sound fishing regulations."

The number of user groups on the Salmon Advisory Panel was obviously more diverse than those on the California Advisory Committee, but consensus on certain issues was possible. When I presented consensus positions to the Council, I was quickly told by certain members that they were not interested in consensus, but instead 22 different opinions. This to me was indicative of the mood of certain fishery managers—keep the user groups fighting amongst one another, divide and conquer!

The regulations that were developed, or the "plan" as it was called, were essentially the very same regulations proposed by the Washington Department of Fisheries in April of 1976. This was to be expected since the chairman of, and the dominant figure on, the Salmon Management Team, responsible for drafting the "plan," was employed by the Washington Department of Fisheries.

The regulations were for the ocean users only, to be applied to that area north of Tillamook Head where the so-called emergency existed. There approximately 50% of the ocean harvest is taken by commercial trollers and 50% by sport anglers (this is different than Oregon and California where the catch is approximately two thirds commercial and one third recreational). However the only substantive cuts were made on the commercial troller.

The reasons for making the substantive cuts on the trollers, shorter seasons, a mid season closure, a 28" minimum size on chinook and the mandatory use of barbless hooks, were many. Bob Hudson earlier mentioned some of the statements made by the Council regarding the trollers.

"The trollers are unregulated." This statement is untrue. Salmon trollers have been regulated for years; governed by legal seasons, size limits and gear restrictions. They are trollers, after all, because they are not allowed to use gillnets in the ocean. They are also regulated by conditions that no earthly fish manager can control—weather, water temperature, and the desire of a fish to bite a hook.

The troll fishery is different from a river gillnet fishery, and thus what regulations are needed must be different. Further, it should be realized that trolling is the most difficult of the salmon fisheries. Trollers work hard to

produce food, and in so doing spend long hours away from home, often under intolerable conditions and at great risk to life. They are hardly unregulated!

"The Washington recreational fishery took cuts in 1976". This statement is untrue. Both the troll and recreational fishery accepted some cutbacks in 1976, but the only substantive cutbacks imposed on any ocean user group were on the trollers in 1977.

"The reason the regulations are different is because we must manage for Optimum Yield". It is true that the F.C.M.A. requires management of the fisheries by Optimum Yield. However the Council has yet to define OY and if confusion exists on OY, the Council also seems confused by the term MSY. MSY is typically used to mean the maximum amount of a species that can be taken and yet maintain a stable population. Traditionally salmon have been managed by the number in the population and not by total weight. However recently those advocating terminal harvest have attempted to use MSY as a justification for harvesting salmon only when they have reached their maximum growth. Salmon reach their maximum growth, or sexual maturity, at the time they are ready to return to the rivers to spawn. This occurs during a very short time and also at a time, when if the fish has not begun to discolor, where the means of harvest is through gillnetting. Unlike a troll fishery the gillnet fish are not dressed immediately after dying and are thus of a lower quality even if the fish has not begun to discolor and lose its fat content.

The troll fishery harvests fish over a longer period and through a means that provides for top quality. Thus, the consumer has fresh fish on the market over a greater period of time. The demand by both domestic and foreign consumers for troll caught fish is reflected in the price paid for that fish—the highest paid for any salmon in the world.

Harvesting under an MSY concept proposed by proponents of the regulations would result in a slightly higher poundage but in a significantly lower economic return for these same fish. Management under an OY concept would seem to favor a troll fishery. However the managers seem determined to manage the ocean troll catch under their concepts of MSY while at the same time justifying a less restrictive recreational fishery under the OY concept. To me, this is a double standard.

It might be asked why should a California fisherman be concerned. Our concern is for three reasons. First, the troll fishery is highly mobile. Thus it may be necessary for a California fisherman to fish Oregon or Washington waters during a given season and vice versa.

Second, the displacement of Washington trollers affects the California and Oregon fisheries by, not only placing more pressure on the stocks, but increasing pressure on the port facilities and creating congestion on the fishing grounds. The impact this year was significant. At times it was almost impossible to move on the fishing grounds and in port there were sometimes 3 day waiting lists to get fuel and ice.

No study was done of the impact of the displacement. The California hold inspection regulation would have been a somewhat accurate sampling method were it not for the fact that no such regulation was in force in Oregon nor did many boats in California bother with the inspection since there were no Coho available and thus no reason for being inspected.

Third, the nature of the regulations this year set a dangerous precedent for future salmon management coast-wide. What we are seeing is management through the curtailment of the user groups rather than through the enhancement of the resource.

I am often asked why didn't anyone talk to the Council; tell them why their actions were wrong. The Salmon Advisory Panel and those that spoke at the Public Hearings raised many of the same issues I am bringing forth today. The only problem was that nobody listened. I believe the majority of the Council views the salmon advisors and the public hearing process as a legal impediment only.

It is not my intent to be solely negative, I believe there are some positive steps that can be taken through amendments to the F.C.M.A. First, I think that the role of the Advisory Panels should be specifically spelled out in order that both the Councils, as well as the Advisors, know what their task is.

Second, I think the membership of the Councils need to be looked at. If we are to have a renaissance in the fisheries we cannot continue operating under the feudal mentality of the past. In its first report to the California Legislature the Citizens Advisory Committee on Salmon and Steelhead Trout c

Environmental Tragedy". I would submit that our experience this year could be termed a "management tragedy".

On the Pacific Fishery Management Council there are only three industry representatives, there are seven governmental or university employees and one state has over 15% of the vote, less than 1% of the fish. Adam Smith stated that: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, on in some contrivance to raise prices". While I would not say the members of the Council are conspiring against the public, I do think there is some contrivance to do what bureaucrats do best—regulate.

Third, I do not agree with Chairman McKean that the process for developing and implementing F.M.P.'s needs to be shortened. The shortening of this process I believe is only a means of avoiding due process. If all of the F.M.P.'s that are being developed, other than salmon, it is clear that the problem is not in the hearing process but rather the time table the Council has developed to bring these to the introductory stages.

Finally, I would agree with Chairman McKean that monies are needed for the studies necessary for developing F.M.P.'s under the OY concept. In attempting to manage the fisheries on the "best knowledge available" we soon find that past studies and reports were either biased or woefully inadequate. I would however, caution against perpetuating studies without ever seeking positive steps toward fishery enhancement. One of the purposes of the 200 mile act was to spawn fish, not bureaucrats!

FISHERIES DEVELOPMENT LEGISLATION

I do not want to speak to any specific piece of fisheries development legislation, but only to the fact that it is needed and what perhaps should be considered.

If there is to be a renaissance of the American fishery it is not only necessary that there be sound management and conservation practices but that capital and a sound business climate be made available for the domestic fisheries. A program of grants and low interest loans is needed for both new vessel construction and the construction of modern shore side processing facilities, including those to fishermen's cooperatives. The capital is particularly needed to develop the vessels and processing needed for the full U.S. utilization of previously under utilized stocks such as hake and pollock.

In any type of fishery development legislation I would offer the following precautions. First, that party boats, charter boats, or commercial passenger carrying fishing vessels as they wish to be called, not be confused with commercial fishing vessels or the commercial fishing industry. The purpose of the charter boat is to provide recreation; the purpose of the commercial fishing vessel is to produce food. The two roles are quite different and by no means synonymous. The reason I bring this to your attention is the N.M.F.S. is apparently having difficulty distinguishing between those that produce food and those that play with it.

In the Eastland Resolution Hearings Survey one recommendation was that charter boats be considered as commercial fishing vessels. While I recognize that the Eastland Survey is probably the best study to date of the U.S. fisheries I think it should be recognized that it was the charter boat industry that asked that they be included as commercials. The reasons are obvious, it would then allow them access to the various government programs (e.g., The Fishing Vessel Obligation Guarantee program) that are not now available to them plus give them top fuel priority in any future fuel allocation program.

I do not deny that charter vessels have a valid need and I further recognize that their business is a commercial venture. However, their business is to provide recreation, not food, and as such they should be categorized separately and not defined as commercial fishing boats, which they are not.

Secondly, any low interest loan, loan guarantee program or grants must not be viewed in a vacuum. The relationship of the government to the fisheries in the past has been much like that of an absent parent to a child. When the parent did visit, the child was often provided toys or money, but no thought was given to the child's needs or development. The fishing industry has had government loans and loan guarantees available in the past but too often these have caused a boat building flurry with no thought of how to take the older and obsolete vessels from the fleet.

Finally, along with fisheries development legislation, development of aquacul-
as the natural extension of commercial fisheries must be considered. Low
loans and grants are also necessary in this field to provide the small

aquaculturist, the fishermen's cooperative and the public non-profit groups the necessary capital to operate. Without this we can expect the aquaculture industry to be dominated only by those large conglomerates with the capital necessary for such an endeavor.

Again here, I would offer a word of caution that no government funds be made available, nor indeed that the government encourage, any private salmon return-release system or as it is better known—ocean ranching. The reasons are many. First of all, public agencies should not be absolved of their responsibility to carry out the mitigation and enhancement necessary to restore our salmon stocks to the state they were prior to the destruction of their spawning and rearing habitat.

Secondly, the problem with private ocean ranching is that there is no guarantee that these fish will be available to the public, although they are feeding on public forage fish. Genetic manipulation, time of release and curtailment of ocean users through Legislative or Council imposed restrictions are all means available to the private ocean rancher to avoid public harvest of these fish.

Third, sportsmens organizations, commercial fishermen's organizations and other public spirited groups have proven that they can raise salmon for release, successfully and for a minimal cost. These fish are released for their harvest in the ocean. There is thus both a problem with, and a questionable need for, private ocean ranching.

FOREIGN INVOLVEMENT

As I have mentioned before, the F.C.M.A. was passed largely as a means of controlling the foreign harvest of fish off our coasts. The problem is that foreign nations can circumvent much of what the act sought to do through high seas purchases from U.S. vessels, controlling interest in U.S. fishing vessels and controlling interest in U.S. share side facilities.

We support the thrust of the AuCoin-Studds legislation to control foreign investment in U.S. vessels. We are also concerned with sales by U.S. vessels to foreign factory ships, since this is hardly a stable market. But we would not ask the door be shut on foreign involvement entirely.

Foreign companies can provide an important source of capital to the fishing industry that has often not been available in the past. Also foreign companies can provide markets that are not available domestically or as an alternative to domestic processors.

We do share the concern that foreign corporations do not dominate the U.S. fishing industry which we do consider strategic. But this does present a dilemma for us since the relationship between U.S. processors and U.S. fishermen has often been one of "patrician and plebeian, lord and serf".

Our concerns then are that foreign investment not be cut off, but that controls be enacted so that it not dominate the U.S. fishery. Further, certain protections must be afforded the U.S. consumer.

It is obvious that such control or watch dog authority not be given to the Regional Councils. My own suggestion would be that if such authority were needed that it be vested in persons from each of the council jurisdictions, 5 fishermen and 3 processors and finally one N.M.F.S. expert on capital investment in the U.S. fishing industry.

Senator Packwood I want to thank you for the concern you have shown for the fishing industry and for the opportunity to submit these rather lengthy comments to you.

Sincerely,

ZEKE GRADER, *General Manager.*

SAVE OREGON'S RESOURCES TODAY, INC.

September 17, 1977.

To: Robert Packwood, Senator for Oregon.

From: Forrest L. Meuret, Vice President and Legislative Director for SORT.

Re: Supplemental to testimony at Newport, August 20, 1977, on fishery problems.

You may recall that one witness at Newport had no concern for the personal use fishery, because "recreationists would spend that money elsewhere if they couldn't fish". You will also note that the writer of the open forum letter, one of three copies of clippings enclosed, does not even know that sports or personal use fishery exists. He says, "We are all fishing commercially".

We also note the extreme antagonism, by the commercial fishery, for the charter operators. I am certain that the charter boat costs as much

boat, and that it's owner is just as much concerned with his way of life as anyone else, as is all the rest of the recreational service and supply industry. The charter operator merely provides a platform for the personal use fisherman to fish from. What difference if the fisherman angles from a rock, stream bank, the beach, jetty, his own boat, or a charter boat?

The enclosed copy of Closure Reasoning sets forth some very pertinent facts, from a man who surely should know, regarding who kills the "shakers". I see no room for doubt that those commercials, who yell loudest about sportsmen and shakers, really know better. Did you ever see the hooks they use? Or the rest of their gear?

The item on salmon restrictions may be expanded is indeed pertinent, but self explanatory.

Bob Hudson, of ACFMA, told me yesterday, 9/15, that their 1¢ per pound levy yielded \$35,000 by this time last year, but only \$14,000 so far this year. Sportsmen have also had a very disappointing season.

We note that the fish that are being caught are not fat and have empty stomachs. We believe that too many forage fish are being harvested for bait, and that the practice must be regulated or prohibited.

Commercial fishery had to come after civilization had advanced to the point of some measure of trade or barter. Surely the personal use fishery came first. If not, how did anyone come to want to barter for fish? There is no higher, or older tradition, than fishing for personal use. Let us treat it accordingly.

Very sincerely,

FORREST L. MEURET.

Enclosure.

OPEN FORUM

INEQUALITY RAMPANT

ASTORIA.

Fellow fishermen:

I, like most of you, was born in this country of Justice and Equality. The nation with open meeting laws. The nation with compulsory education to learn the English language and the use of the dictionary.

But where is the Justice, when at the start of our troubles U.S. Judge George Boldt turns the English language to babble in his interpretation of Indian treaties?

Where is the Justice and Equality, when fish management allocation is conducted in secret meetings, with the approval of U.S. Judge Robert Belloni? This, I believe, is an outright conspiracy, to void representative government.

Where is the Justice when we pay license fees and the Indian does not?

Where is the Justice, when the government gives the Indians free attorneys, denying the same to nonIndians?

Where is the Justice when Indians are given off-reservation subsistence and ceremonial fish and yet denying same to non-Indians, where there is no mention of either in the treaties?

The fish allocation plan of 40 percent to Indians and 60 percent to non-Indians in the spring and the reversal of these figures in the fall, is a farce to equality.

We are all fishing commercially and any division, if made, should be on the number of harvesters, the resource, about 1,000 non-Indian fishermen and about 200 Indian fishermen. If percentages are to be used, that would be about 80 percent to non-Indians and 20 percent to treaty Indians of the harvestable fish. Anything less would be inequality.

GILBERT PITKANEN.

PEOPLE'S OWN CORNER

CLOSURE REASONING

ANCHORAGE CHARTERS, *Iwaco, Wash.*

To the Editor: It may be possible to point out some of the reasoning behind the commercial closure of salmon fishing from Tillamook Head (the area off Seaside) to the Canadian border (the Washington waters) during the latter two weeks in June.

The boundary areas in question include some of the richest estuarine feeding grounds in the Pacific. It is virtually a nursery for both pelagic and anadromous fish. Here and in the gulf waters of Alaska, our young feeder salmon mature.

Food is abundant in these waters and here both the young (shakers) and adult salmon feed voraciously during the summer period in question.

They are preyed upon by seals, sea lions, sharks and man. The latter is designated as a commercial fisherman, or as a recreational or sports fisherman.

The commercial fisherman has a boat equipped with power take-offs that can handle steel wire, 10 to 40 pound sinkers and a dozen to 60 "spreads"—hooks with lures.

With heavy-duty gear such as this, it is difficult to determine when an immature salmon is on one of the hooks until the gear is brought up to the surface to check periodically. One or more spreads may be full of "shakers." If these juvenile fish are not drowned at the time they are boated, removal of the commercial hooks will often maim them to the point where they become prey for the seagulls.

Due to smaller hooks and lighter tackle, a charter boat with 10 or 12 sports fishermen may hook and release as many as 60 juvenile fish in one day's fishing with no loss from maiming or drowning.

I have operated both commercial boats and charter boats on the Oregon and Washington coasts for over 30 years and I intend not to whitewash either of the parties, but to enlighten.

DON E. DEMING, *Skipper.*

SALMON RESTRICTIONS MAY BE EXPANDED

(By Eric Goranson, Journal Staff Writer)

BOISE.—The controversial commercial salmon fishing regulations applicable to the ocean waters north of Tillamook Head this year may be extended southward to cover the entire West Coast next year.

Donald Bevan, a fisheries biologist at Washington University, recommended to the Pacific Fishery Management Council here that it adopt several salmon fishing rule changes next year, most of which would extend rules applied to the fishery north of Tillamook Head southward.

Bevan urged that barbless hooks be used south of the landmark as well as to the north prior to July 1 in fishing for chinook.

He also asked that the council consider making the minimum size for chinook be 28 inches for the entire coast and not just north of Tillamook Head. Currently 26 inch chinook can be caught and kept south of the head.

Bevan recommended a uniform 16-inch size for coho for the entire West Coast, claiming California has "no biological basis" for requiring a 22-inch coho.

Closure of the ocean to commercial fishing in June south of the head should also be considered, he stated.

And he urged the council to seek legal advice on setting a date after which no additional people can enter the salmon commercial fishery livelihood.

The council, which met in Idaho for the first time, took no action on the recommendations, but will take them up at its September meeting.

In one of the few actions taken, the council rejected a request by the Makah Indian tribe on the coast of Washington to establish an ocean gill net season for salmon. The tribe claimed it had an historical right to use nets in the ocean for salmon.

Testimony against the proposal pointed out that for years the U.S. has been trying to get the Japanese to cease net fishing for salmon in the ocean and that to allow the tribe's request would endanger negotiations between Canada and America on salmon fishing in the ocean.

In another matter, Bevan said the council should look into outlawing current salmon sports fisheries practices in California which allow sports fishermen to take salmon using fixed troll gear instead of by a hand held pole.

MERCER ISLAND, WASH., *September 14, 1977.*

HON. ROBERT PACKWOOD,
*Senate Office Building,
Washington, D.C.*

Subject: Testimony for the record—Senate Commerce Committee—Commercial Fishing Industry Hearings, Newport, Oreg., August 20, 1977.

DEAR SENATOR PACKWOOD: Enclosed for your review is a copy of an article to be read into and attached as supplement to the record of the subject matter.

Unfortunately, I was unable to personally attend the August 20th hearing due to the fact that I was albacore fishing some 175 miles off the Cali-

ifornia coast at the time. My views, as a commercial fisherman who has participated in a number of fisheries (salmon, bottom or groundfish, crab and tuna (albacore)), on the subject of foreign investment in, or the participation in U.S. fisheries are only partially expressed in the enclosure.

I regret that the NMFS and others have given such casual attention to foreign inroads into the control of U.S. fisheries resources and domestic politics relating to the same. The long run effects of such foreign involvement could prove a serious detriment to the utilization of fisheries resources by U.S. fishermen.

When questioned about the economic impact of such foreign involvement, the NMFS has given a number of conflicting responses: (1) they do not have staff with expertise to analyse the issue; (2) they have no authority on which to make a negative statement as to what the impact would be; (3) they think foreign investment and involvement would benefit the U.S.; (4) they have no way of knowing who or which companies operating in the U.S. are foreign owned, controlled or in which foreign persons have an interest in.

I trust that you and your staff will make a thorough investigation into the matter before you take a position regarding this issue. At present, as you know, foreign interests, working with and through U.S. companies and citizens as well as at the diplomatic level are making a strong case for their point of view. Few U.S. fishermen have much of a background in business, let alone international business and trade, to evaluate the issue in terms of the future of U.S. commercial fishing and fishermen. I would only hope that your good offices could assemble the expertise to make a proper evaluation.

Respectfully,

DON CROUCH, *Commercial Fisherman.*

FOREIGN TAKEOVER OF U.S. FISHERIES

By Don Crouch

Should the U.S. continue to permit U.S. fishery resources and domestic fishing companies to be acquired by foreign interests?

Should Regional Fishery Management Councils (established pursuant to P.L. 94-265, 200 Mile Act) permit foreign companies and processors to acquire fish from U.S. fishermen within the U.S. 200 mile zone?

These and related questions are being raised and are beginning to receive more public attention subsequent to the passage of the 200 mile Act. At present there seems to be a considerable difference of opinion among fishermen, among the members of the various Regional Management Councils and among politicians.

To some extent the various opinions voiced on the subject have focused on short run objectives (those within 1 to 2 years) rather than on long-term goals.

Before one can evaluate the pros and cons of these issues, some background is in order. Domestic (U.S.) fishing companies, canners, packers and processor were largely owned and controlled by U.S. citizens until 1967. There were exceptions, usually involving Canadian-U.S. ownership. After 1967 an increasing amount of interest was expressed by foreign companies and investors in acquiring U.S. fishing companies. By 1970 it became evident that foreign companies were securing a position in the U.S. market for edible fish and fish products by the acquisition of U.S. fishing companies. By 1974 foreign interests had acquired or were in control of a considerable number of fishing companies previously owned and controlled by U.S. citizens. The trend has continued. On the West Coast the predominate foreign interest is held by the Japanese. To date, there are few remaining fishing companies of any consequence that can be said to be owned and controlled by U.S. citizens. In a period of ten years control of fishing companies, canners, packers and processors doing business in the U.S. has shifted from one of ownership and control by U.S. citizens to ownership and increasing control by foreign interests.

Over the same 10 year period (1967-1977) :

imports of fishery products into the U.S. increased from \$707 million to over \$1.5 billion dollars per year ;

foreign fleets fishing within 200 miles of U.S. coasts have doubled their catch ;

U.S. landings of fish and shellfish have remained constant (no appreciable increase or decrease) ;

U.S. consumption of fish and shellfish has increased from 10.6 lbs. per person to over 12.8 lbs. per person and the U.S. population has increased by some 18 million people resulting in an increased demand for edible fish of some 40 million pounds ;

extended fisheries jurisdiction, most commonly 200 miles, has been almost universally applied by coastal states (Nations).

Politically, the question of foreign ownership and control of U.S. fishing companies was not officially raised until 1972 when the NMFS reviewed the question in response to a State Department inquiry; most probably as a result of increasing Japanese pressure in Washington, D.C. and the fact that the Japanese, the number one fishing nation in the world, had made substantial inroads toward acquiring the control of previously U.S. owned and controlled fishing companies particularly on the West Coast and in Alaska. In 1973 NMFS (NOAA) published its official reply in the Federal Register (Vol. 38, No. 203 10-23-73).

“. . . it is believed . . . foreign investment in U.S. fishing companies . . . should not be considered detrimental to U.S. interests but rather as serving U.S. interests in a beneficial manner.”

Recently, Senator Warren Magnuson. (Wash.), Chairman of the Commerce Committee, has publicly given his support for foreign ownership and control of the few remaining U.S. owned and controlled fishing companies. Senator Robert Packwood (Ore.), and Congressman Doug Young (AK), have also voiced support for foreign involvement in U.S. fisheries.

Economically, Japan has been the most aggressive and successful foreign nation involved in and with the takeover of ownership and control of previously U.S. owned companies. As the number one fishing nation in the world it can be expected that Japan's predominance in this area and the U.S. will continue. Accordingly, a brief perspective of the Japanese philosophy of doing business in general is appropriate.

Japan has historically been dependent on foreign trade for survival. Japan's dependence on foreign trade became increasingly critical during the 1920's and 1930's as Japan began to industrialize. Japan's industrialization paralleling, in point of time, that experienced by the U.S. during the same period. Unlike the U.S., Japan had no vast supply of natural resources on its island empire. By necessity, Japan recognized its need for and dependence on foreign sources of raw materials (natural resources) to fuel its growing industrial economy. During that period Japan focused the majority of its attention on the mainland of Asia as the logical source of supply of raw materials. Japan has continued to recognize the value of controlling natural resources and has placed a strong national priority on obtaining the same. The Japanese government, unlike that of the U.S., is in partnership with Japanese industry. The Japanese government facilitates and supports Japanese industrial expansion on an international political basis. Like other types of natural resources, the Japanese government encourages the Japanese takeover and control of fishery resources by Japanese companies. The Japanese government in conjunction with Japanese industry has lobbied and been persuasive particularly here in the U.S. in the area of fisheries. The cartel type of structure of Japanese business and its long experience with international trade augments Japanese control of U.S. fishing companies and the ability to fix prices for fish and fish products produced or sold in the U.S.

The operation of previously U.S. owned and controlled fishing companies by foreign interests is noteworthy. On the surface appreciable change is hard to detect largely due to the fact that previous management personnel have generally been retained. But it is interesting to see some emerging tactics that affect the so called “benefits” of foreign control to U.S. interests.

The “Paper Shuffle,” what is it? A foreign-owned or controlled U.S. fishing company buys and/or processes fish in U.S. then sells the product to foreign parent company trading affiliate at cost or loss. Goods (canned fish etc.) are placed in bonded customs storage in U.S. and are considered to have been technically shipped out of the U.S. The foreign parent company's trading affiliate (a foreign company) sells goods (same canned fish etc., held in bonded customs storage in U.S.) to a U.S. retailer at a substantial profit. Goods are then shipped (technically imported into U.S.) from customs storage in U.S. to retailer in U.S. Net result to U.S.—U.S. fishing company (foreign controlled) reports no profit or reports loss and pays little if any U.S. taxes. The Foreign parent company's trading affiliate (a foreign company) makes profit but pays no U.S. taxes. Of course there are a number of variations to the “Paper Shuffle” including “Musical Ships.”

The “Grand Illusion”—Fishing company previously owned and controlled by U.S. citizens and operating in U.S. for years, has established brand names or product labels that are well accepted by U.S. consumer. U.S. company is sold out, including its trade marks, brand names, labels, etc., to foreign in foreign company. Foreign interests operate foreign fishing vessels wi

200 mile zone, catch and process fish from U.S. waters. Fish are imported into U.S. and sold on U.S. market under the old familiar brand name or label which lists ingredients (FDA requirement) and U.S. company (a foreign controlled but located in U.S.) but not where fish were caught. Net result to U.S.—no market for fish caught by U.S. fishermen or low price for fish caught by U.S. fishermen; both U.S. fishermen and cannery workers remain tied to dock or unemployed. Further, since U.S. fishermen are not utilizing species or fish stocks foreign fleets will continue to be permitted to harvest the same.

The 200 Mile Act in its present form offers no protection to the U.S. fisherman by way of import restrictions, or exclusive access to the fishery resources within the zone. In the long run, foreign ownership and control of U.S. based fishing companies (canners, packers, processors) coupled with the purchase of fish off-shore by foreign tenders will erode the market for the U.S. fishermen's catch making the U.S. fishermen entirely dependent on will and whim of foreign interests for survival; or, in the alternative, forcing the U.S. fishermen to expand and make massive capital investments in plants and equipment in order to insure the market for his product.

Similarly, the 200 Mile Act, affords no protection for the employees and workers who work in fish plants in the U.S. In the timber industry, a form of job protection is provided by the "primary processing" requirement, requiring timber cut from public lands to be first processed by mills in the U.S. before it can be exported. The 200 Mile fishery management zone is analogous to public lands.

Needless to say, the 200 mile act affords no protection by way of limiting or prohibiting foreign takeover of ownership and/or control of U.S. based fishing companies from U.S. citizens.

One hears a great deal today from politicians who make bold statements about the great future for U.S. fisheries; apparently they are referring to the great future for the fishing companies, once U.S. owned and controlled, but which have been and are in the process of being taken over by foreign interests. The fate of the U.S. fishermen is not mentioned in any great detail. There are no subsidy grants for new vessels and equipment, no tax credits and other incentives for acquiring new gear and technology to meet the challenge of fisheries expansion, no exemptions from laws which superimpose restrictions (e.g., Joses Act) on the practical size of commercial fishing vessels and limitations on where the vessel can be built. In sort, there is nothing that will directly help the U.S. fishermen increase his catch within the 200-mile zone.

Yet, foreign takeover of domestic fishing companies and the issue of permits to foreign processors to purchase fish off-shore but within the 200 mile zone will weaken the market for the U.S. fishermen's catch, and over a period of time will render the U.S. fishermen dependent on these foreign interests.

Perhaps it would be appropriate for the U.S. government and politicians to pay more attention to the present and future U.S. needs for protein and jobs, and less attention to the rhetoric of those who represent foreign fisheries interests.

And the U.S. fishermen, well most would not seriously think of getting in the ring with Mohammed Ali; climbing in bed with foreign business interests will result in a similar disaster. Few U.S. fishermen have the background and experience to come out even when dealing with these seasoned professionals.

Two closing thoughts occur to this writer :

(1) When one is controlled by foreign interests, one is dependent on those interests; on the bottom line, what is in Japan's (e.g.) best interest, may not be in the best interest of the U.S. citizens or fishermen, when it comes to fisheries;

(2) For an industrial nation with an expanding population to permit foreign control of its natural resources, is like playing Russian roulette with three of the six chambers loaded.

In short, the best investment for U.S. fishermen who are interested in protecting their future and investments in boats and gear is to buy into the few remaining U.S. owned and controlled fishing companies.

BROOKINGS FISHERMEN'S MARKETING ASSOCIATION.

Brookings, Oreg. September 18, 1977.

Senator BOB PACKWOOD,
U.S. Senate,
Washington, D.C.

SENATOR: I appreciate your interest in the commercial fishing industry. We would all like to thank you for your time and interest. We as commercial fishermen have a hard life at best. We are much like the farmer, in that we must contend with the weather and other adverse conditions which interfere with the

harvest of a product. But unlike the farmer, we have little to say in the propagation of the species which we harvest. We must rely on the different Governmental agencies to do this for us. It is now evident that the dams on the Columbia and other rivers have contributed greatly to the decline of the Salmon fishery, but little has been done to correct the problem.

In the past few years, commercial fishing gear has increased in price even faster than the National inflation rate. The financing of boats has become extremely difficult and often impractical to get. If one contemplates the purchase of a boat and tries to get financing, he would find that most banks, where one would go to finance most any other small business, would tell you how sorry they were, but their bank does not finance commercial fishing boats. The other banks who would, will finance only fifty percent of the purchase price or the survey price, which ever is smaller. With such a large investment, the banks are willing to allow seven years to repay. Production Credit Association would be willing to finance up to sixty percent, to a qualified buyer, for seven years at about ten percent interest.

The average boat which will make enough to support a man and his family will cost forty thousand dollars or more. The overhead on such a boat such as insurance, moorage, license, and general maintenance will add up to four to six thousand dollars annually. So with the outlay of forty to fifty percent of the purchase price and the balance at ten percent for seven years plus the overhead adds up to a pretty high figure before a person even makes a dollar profit. If houses were sold on the same basis, how many would be sold? We receive no subsistence for lost gear, such as crab or fish pots, or any other disaster which might occur, major or minor. We would like to see an easing of the restrictions on the length of time allowed to repay a commercial loan and maybe some type of loan guarantee to qualified buyers from the Federal Government. I would also like to see some type of program to promote the production of some of the under utilized fisheries of the sea. We have stocks of clams and shrimp which have gone untouched and are harvestable and salable. The methods to harvest these products need to be worked out but as it is now, a person must work this out on his own, at the sacrifice of time which must be used to earn a living and meet other payments. The cost is also high and the risk of loss is high.

I know you can be of great help to the industry in your position and I hope you will do what you can, as the fishing industry needs you now as much as the Nation needs the industry.

Thank you.

JAMES O. IRWIN, *Secretary.*

SPRINGFIELD, OREG.

DEAR BOB: About fishing this year it is real poor: no fish, gas high, repair double, dock space up, all gear doubled. Price of Salmon good.

Like the 200-mile limit. Bet it works out O.K. Time will tell. I hope our Salmon come back. Maxine and I will retire in 3 years. I fish commercial full time. Our grandsons fish the boat most of the time now.

About the Nut who wanted retirement at 68 years old. Tell her for one who has a job like hers she could work forever. Any white collar could, but what about loggers, construction workers? 20 years is enough. Then get out. Let our youth have jobs. They have to live also.

I have been paying S.S. for 40 years. I feel I should draw full payment for my last 10 or 15 years. Our life span "65"?

Hope you enjoy this letter. Bet it get's the can.

Yours truly,

CLARENCE E. RICHARDSON.



The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for ensuring transparency and accountability in financial management. The text further elaborates on the various methods and tools used to collect, store, and analyze data, highlighting the role of technology in modern record-keeping practices.

The second part of the document focuses on the legal and ethical aspects of record-keeping. It outlines the requirements for data protection and privacy, as well as the responsibilities of individuals and organizations in handling sensitive information. The text also discusses the importance of data security and the measures that should be taken to prevent unauthorized access and data breaches.

The third part of the document provides a detailed overview of the various types of records and documents that are commonly used in business and industry. It includes a list of record types such as contracts, invoices, receipts, and correspondence, and explains the specific requirements for each type. The text also discusses the importance of maintaining a clear and organized filing system to facilitate the retrieval and management of records.

The fourth part of the document discusses the role of records in decision-making and strategic planning. It explains how records can be used to identify trends, analyze performance, and make informed decisions about the future. The text also discusses the importance of records in legal proceedings and the role of records in dispute resolution.

The fifth part of the document provides a summary of the key points discussed in the previous sections and offers some final thoughts on the importance of records in business and industry. It emphasizes that records are a valuable asset and that proper record-keeping is essential for the success of any organization.

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